

FIG. 1

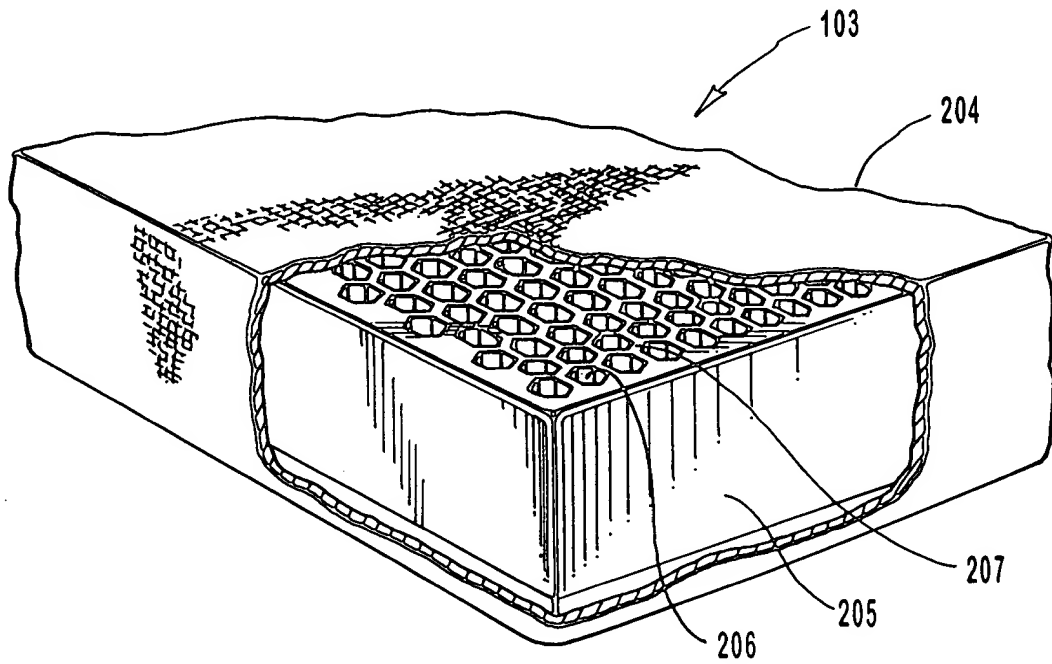
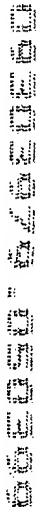
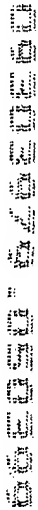
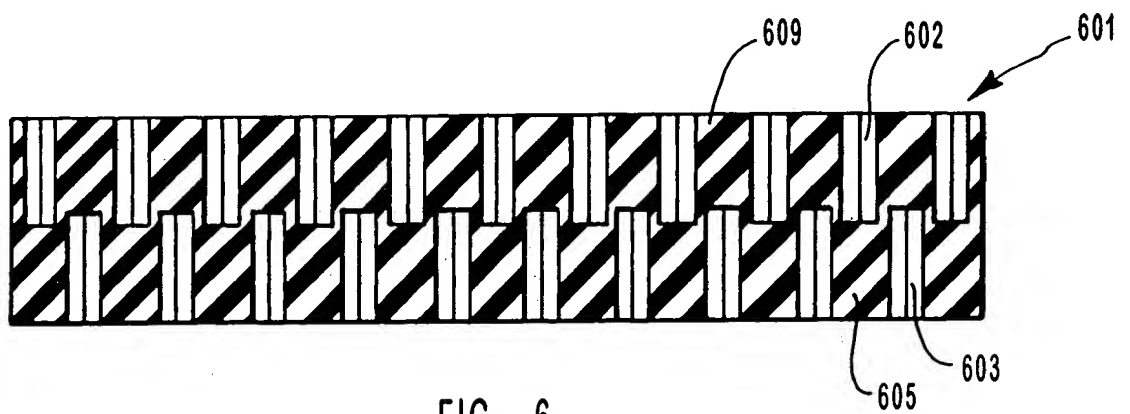
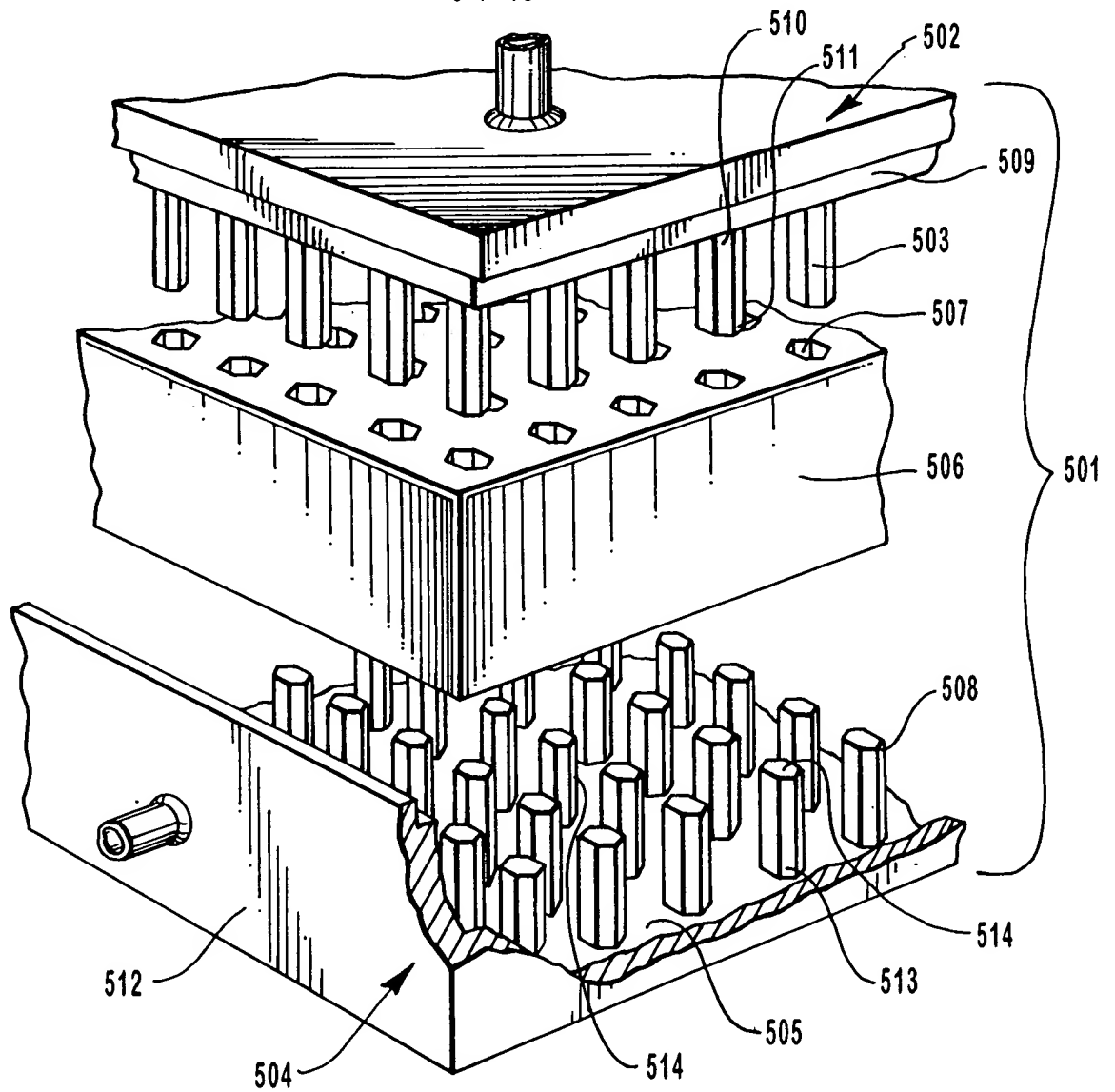


FIG. 2





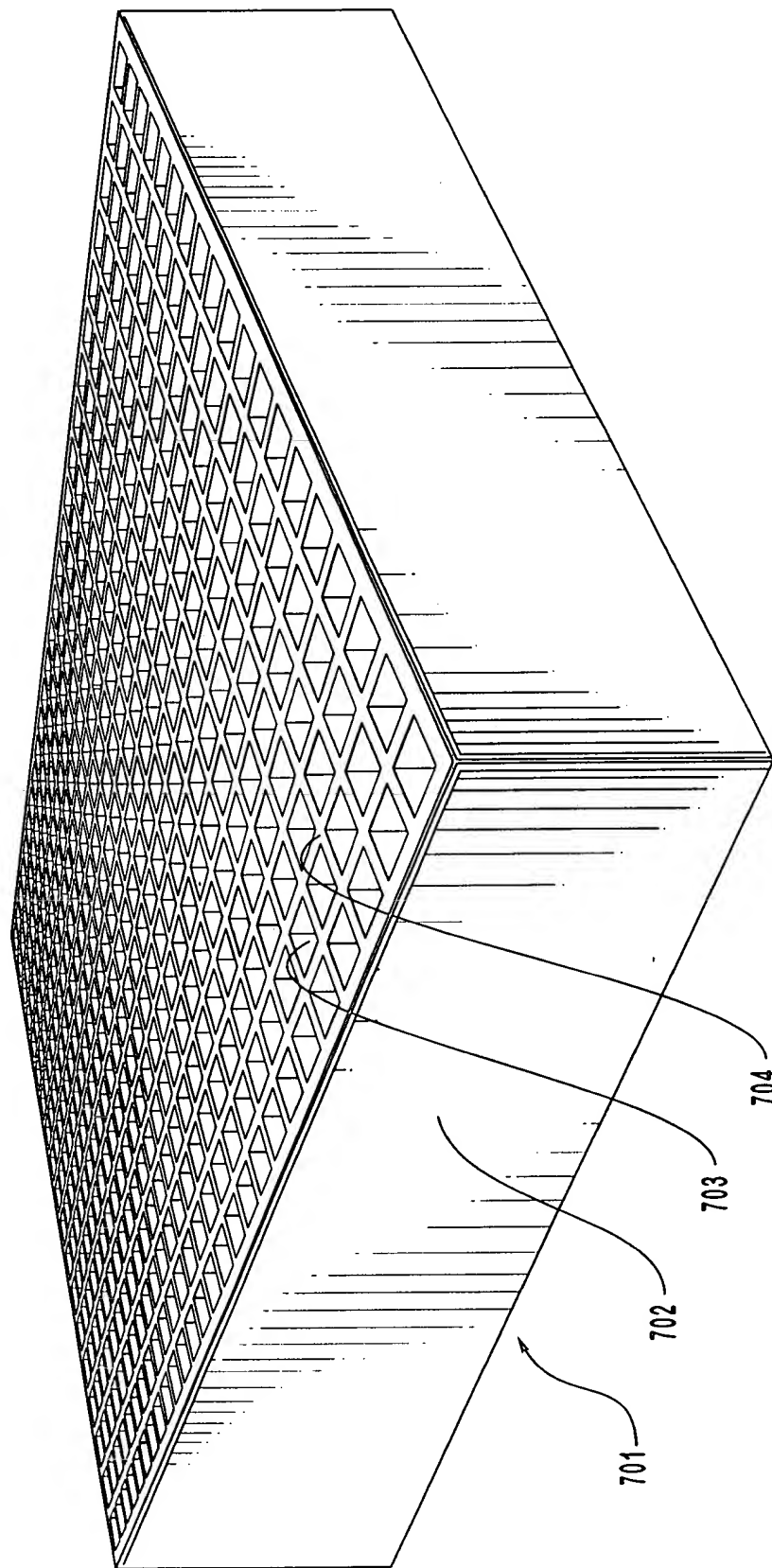


FIG. 7

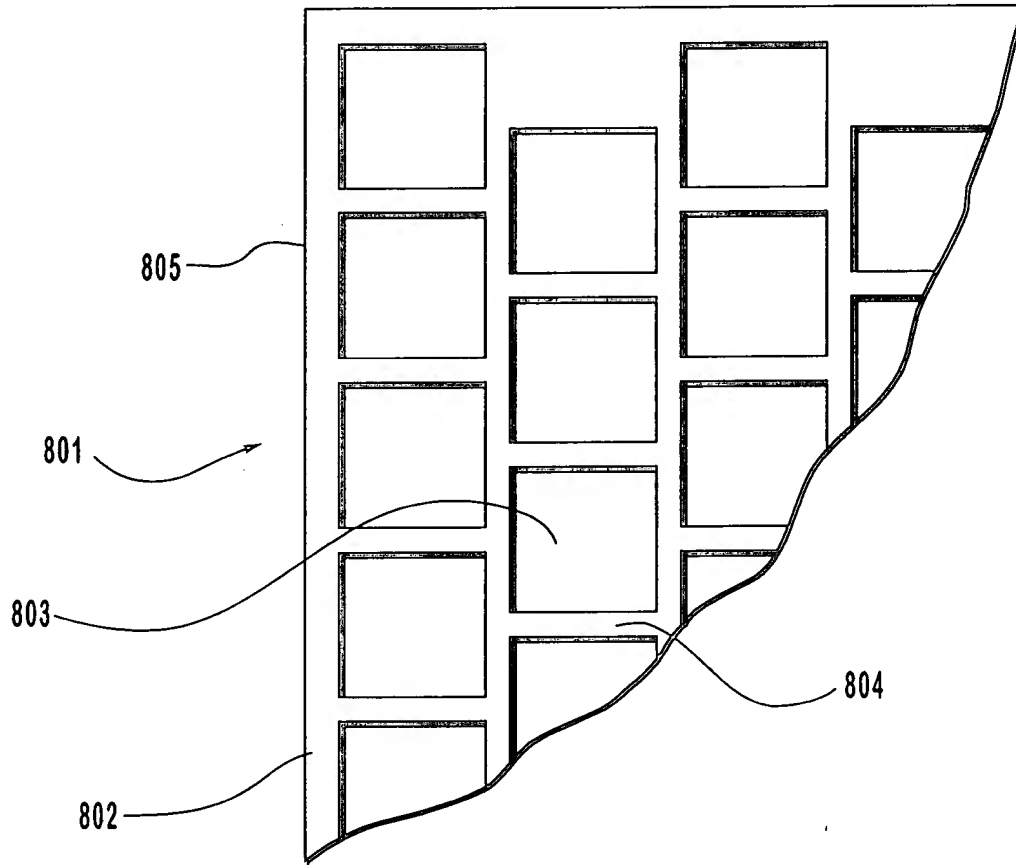


FIG. 8

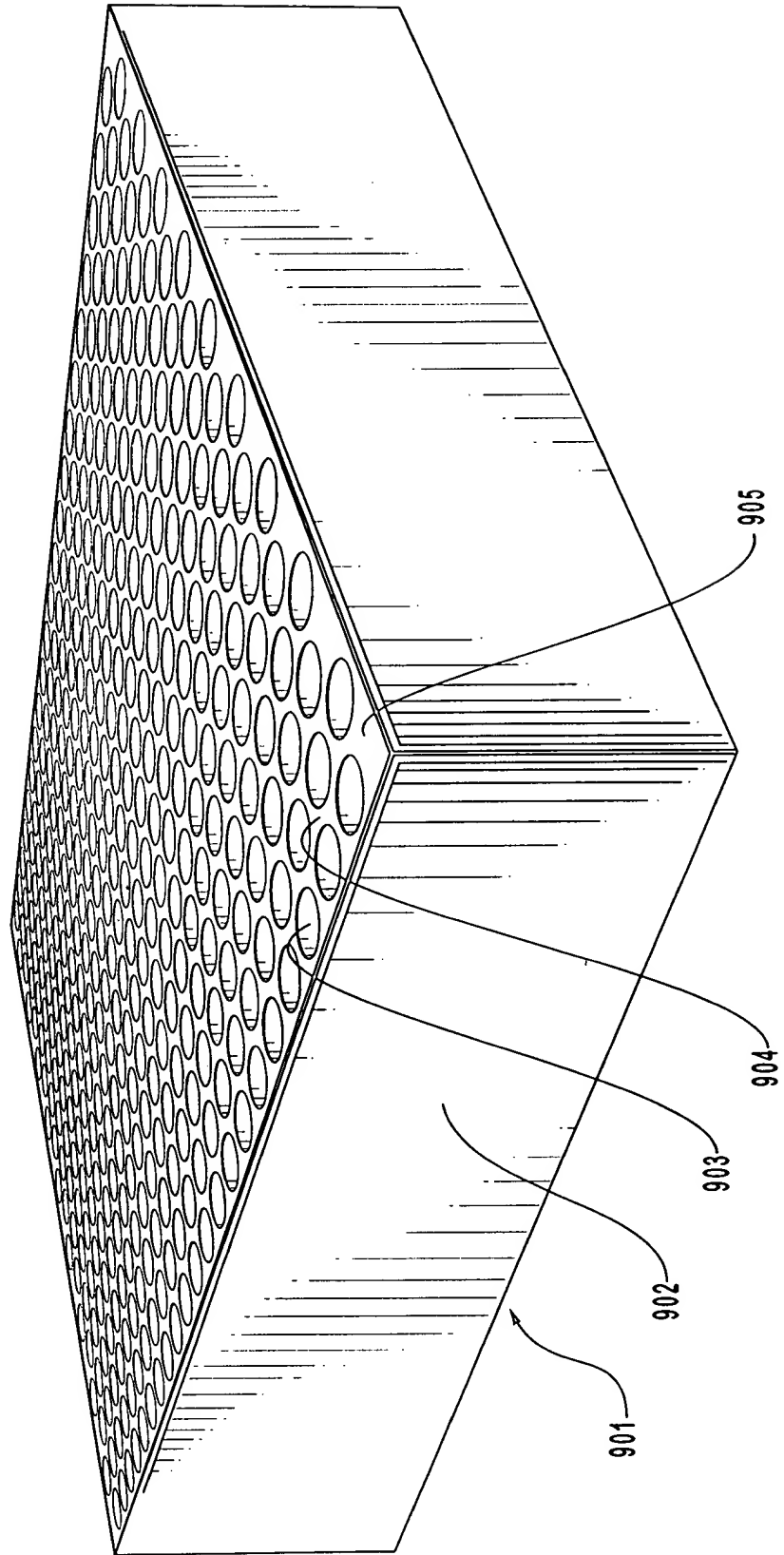


FIG. 9

66E090" 626E0E00

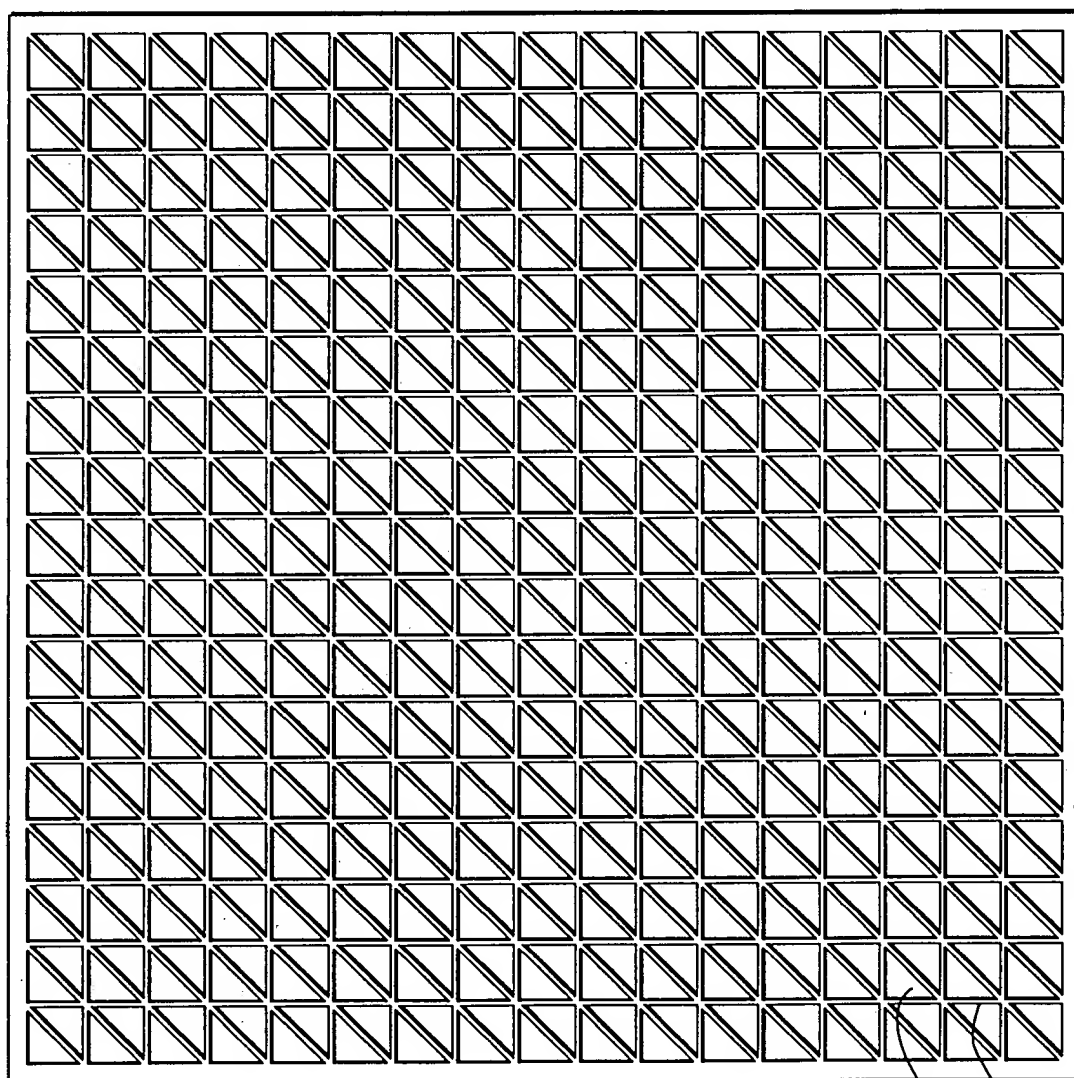


FIG. 10

1002

1001

1005

1003

1004

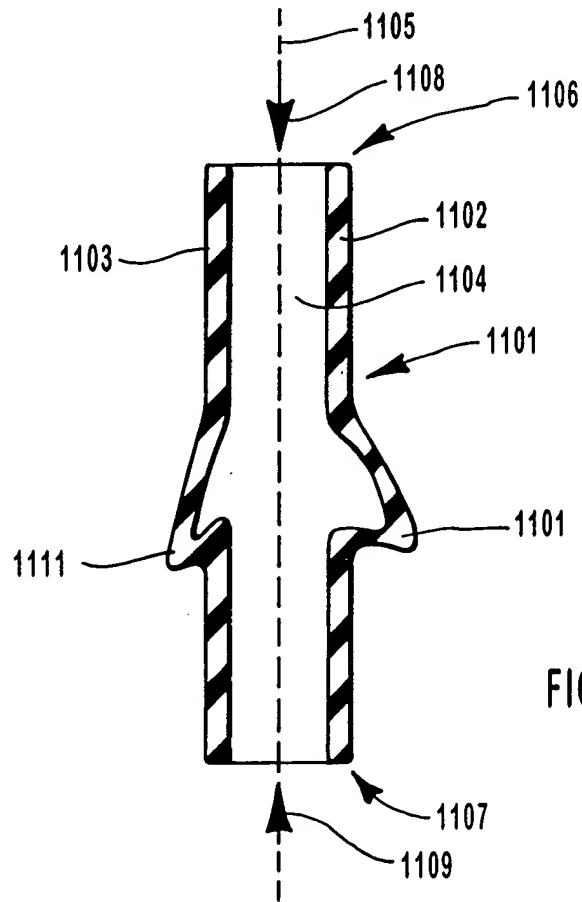


FIG. 11

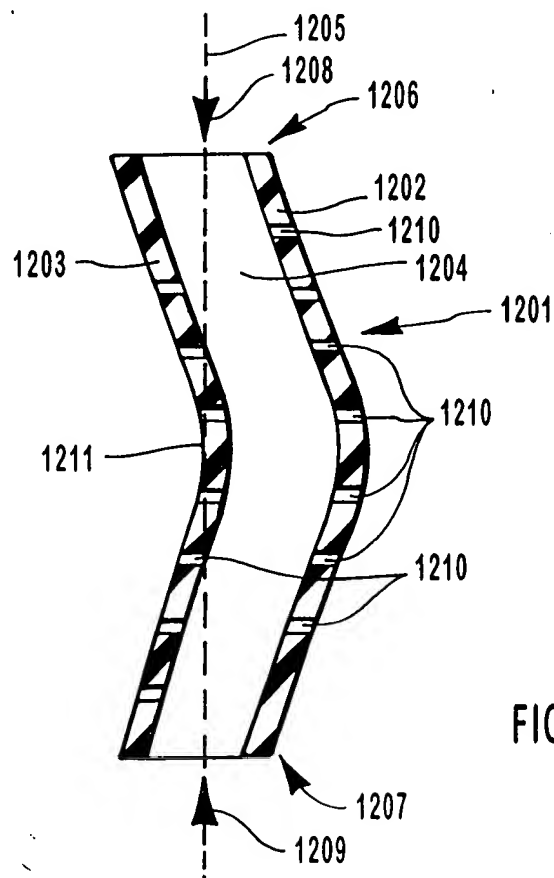


FIG. 12



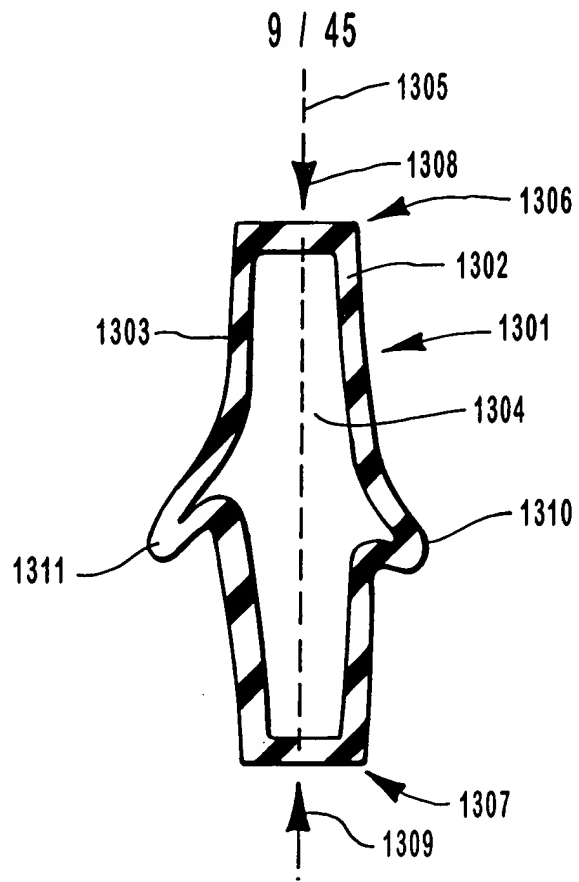


FIG. 13

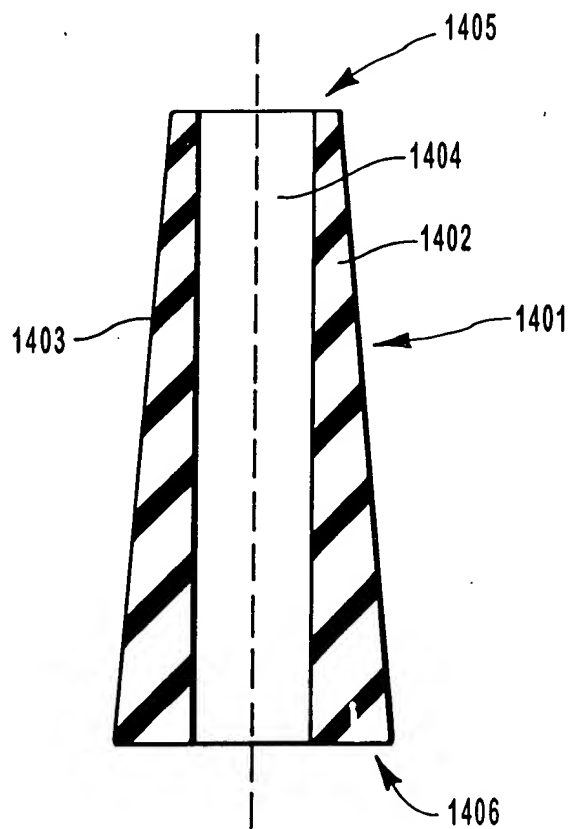


FIG. 14

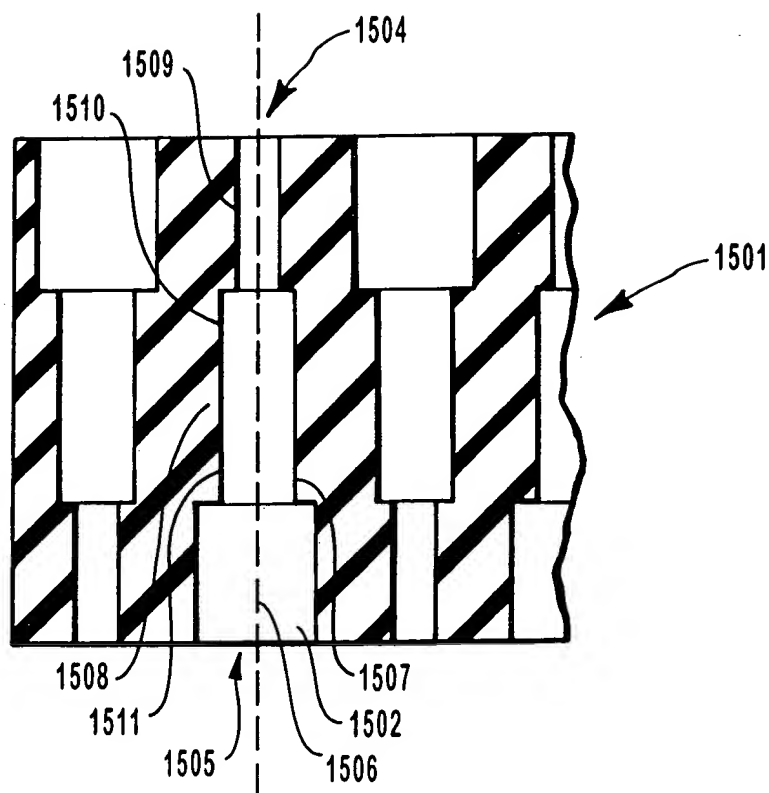


FIG. 15

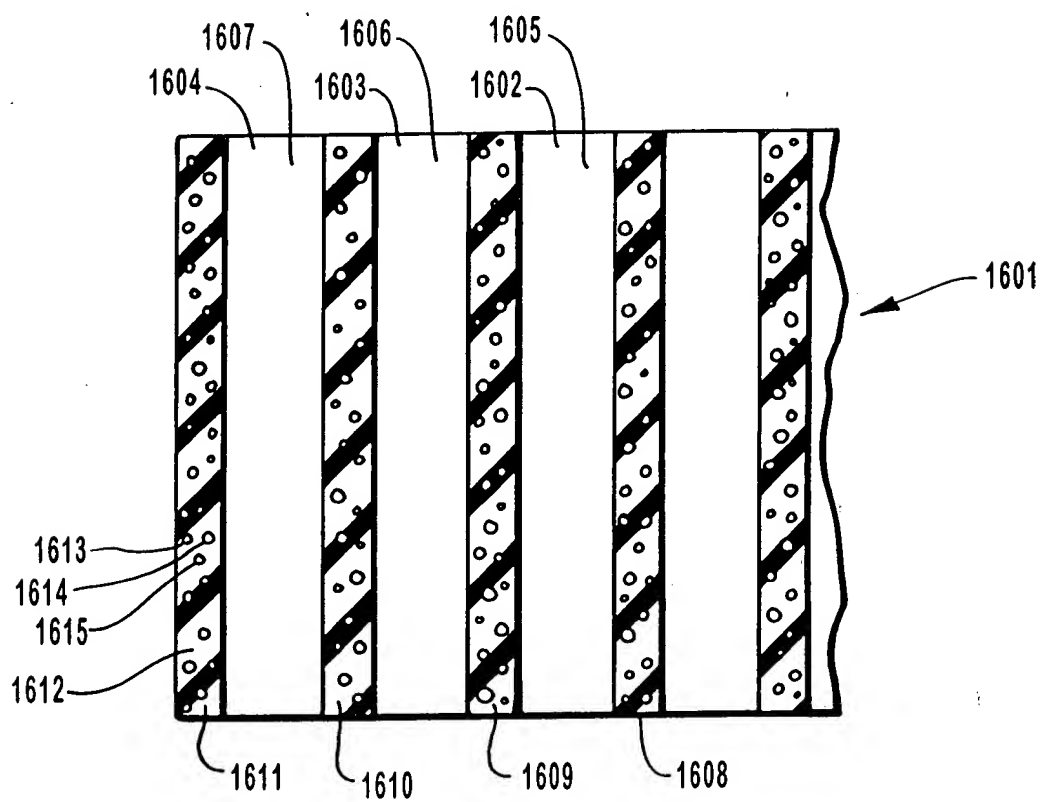
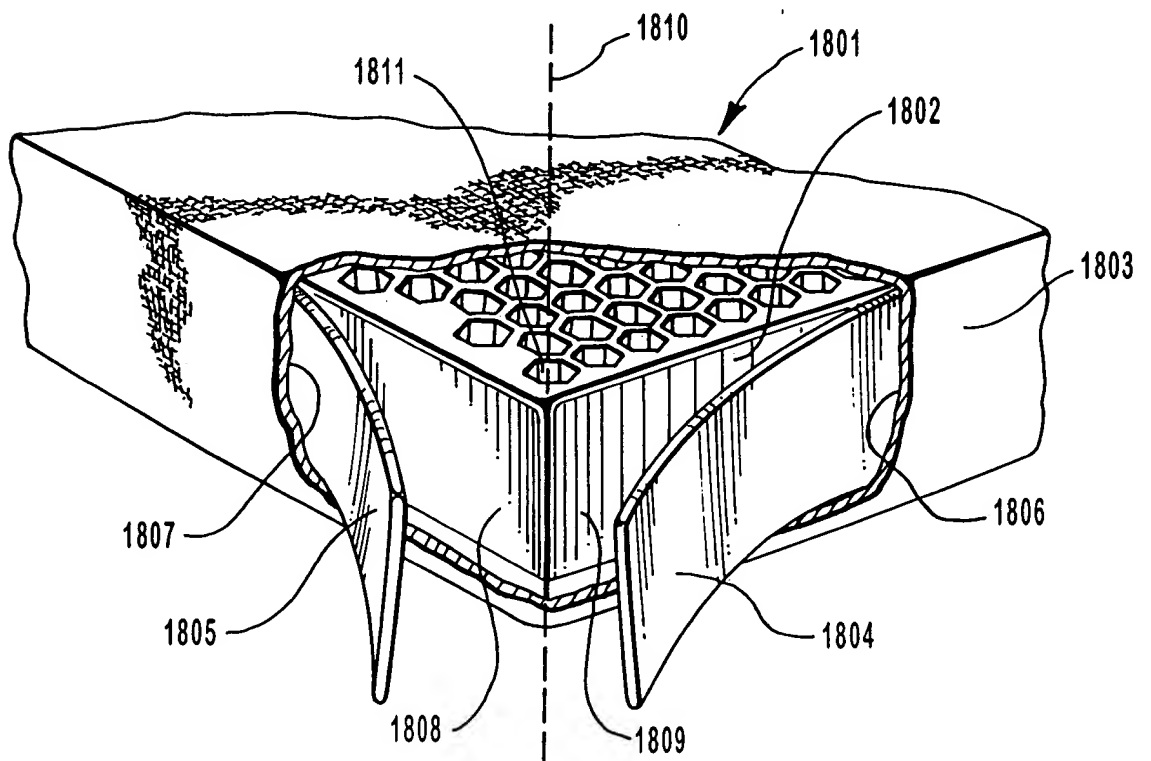
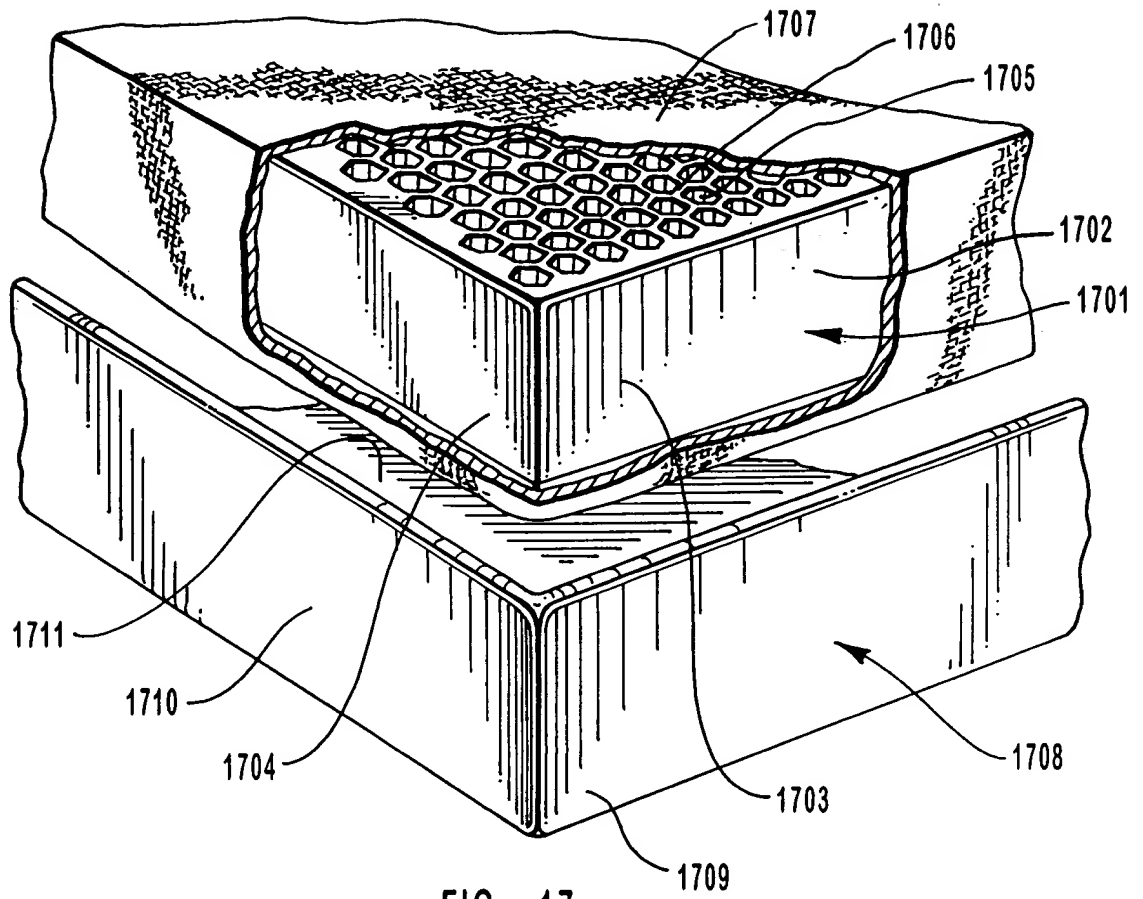


FIG. 16



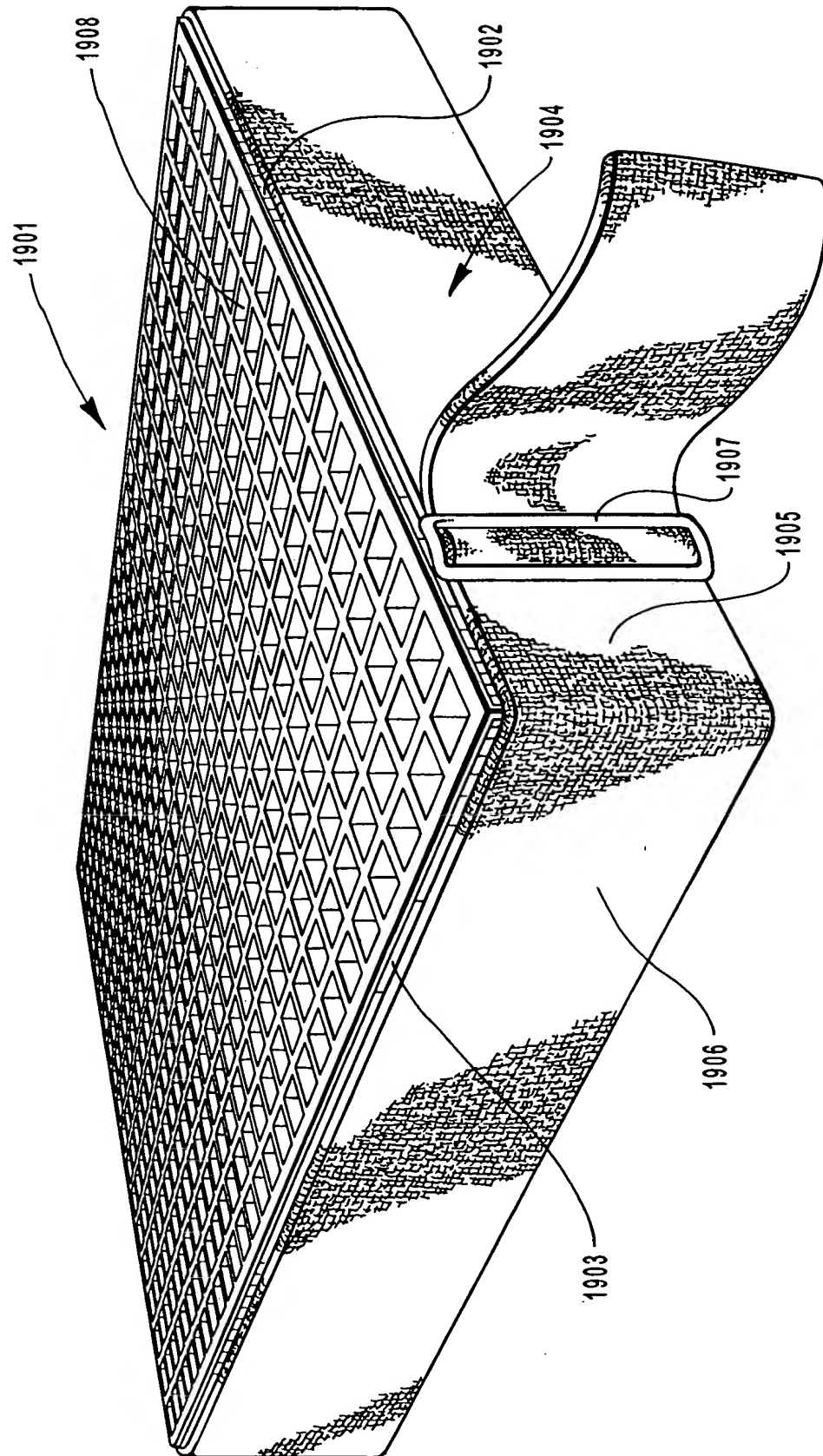


FIG. 19

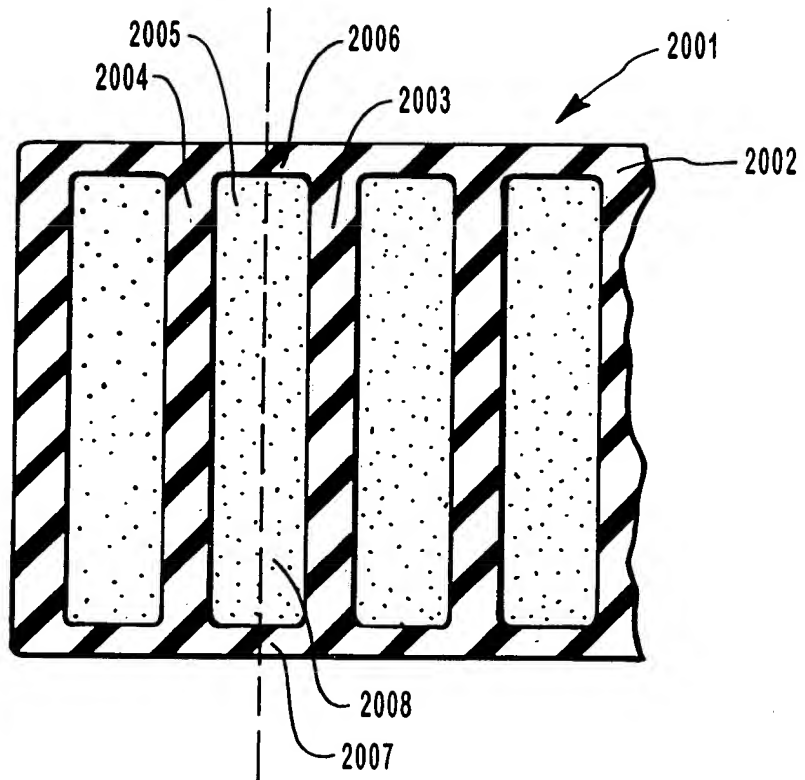


FIG. 20

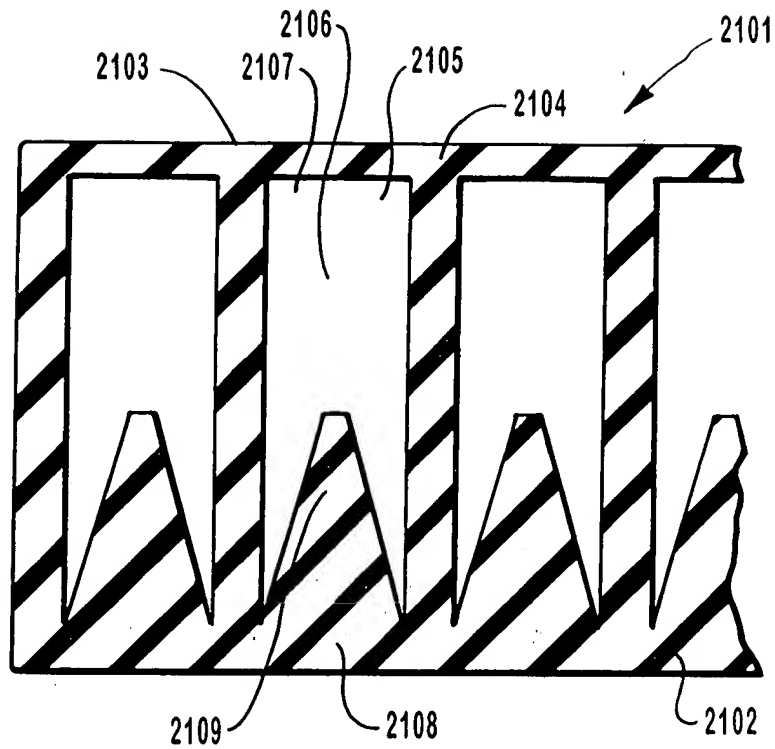


FIG. 21

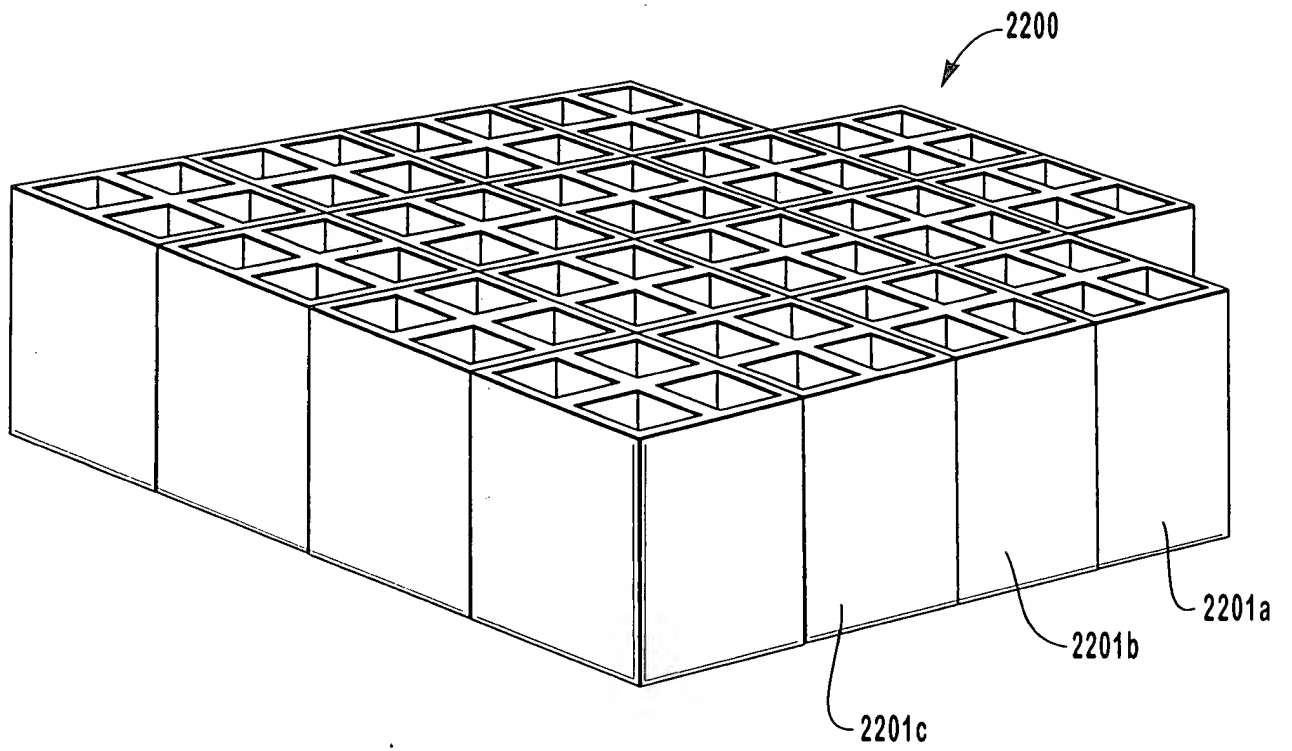


FIG. 22

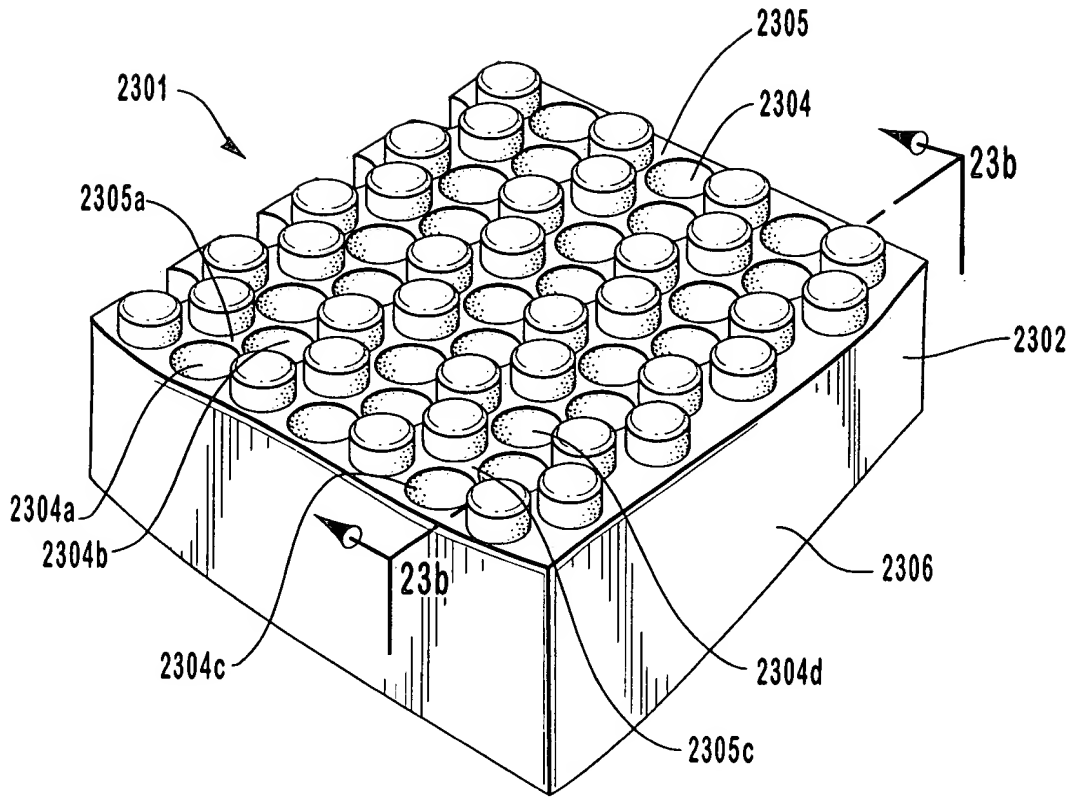


FIG. 23a

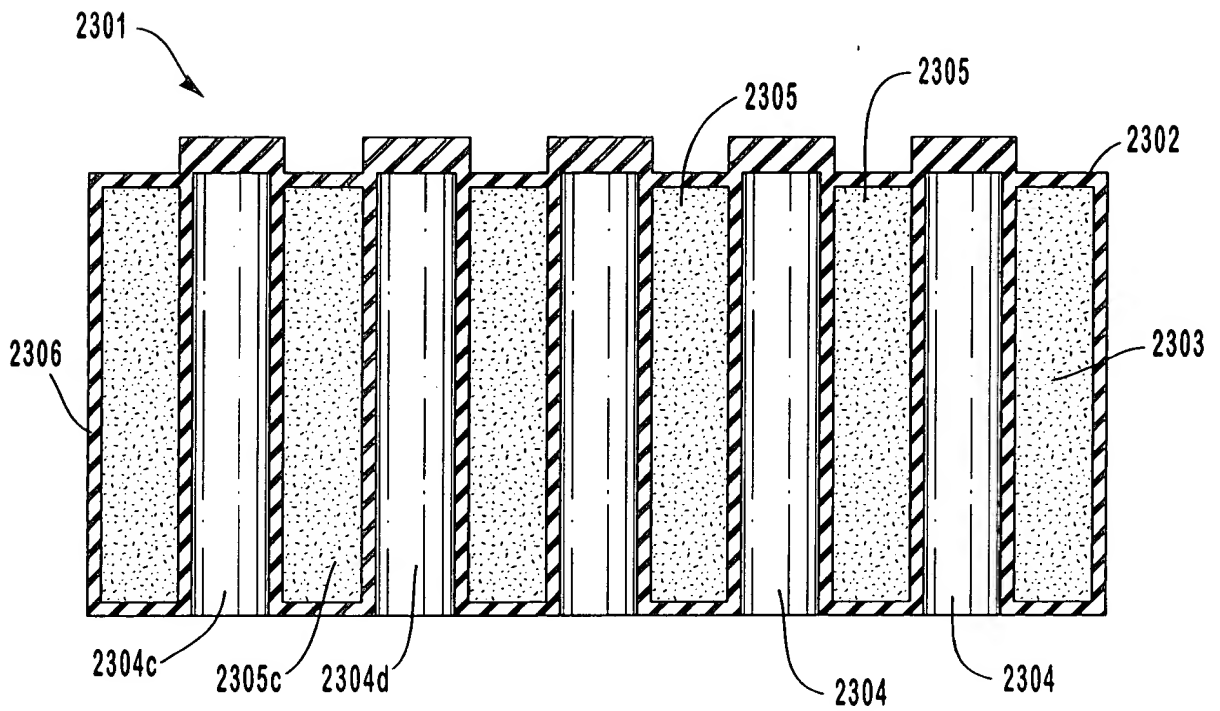


FIG. 23b

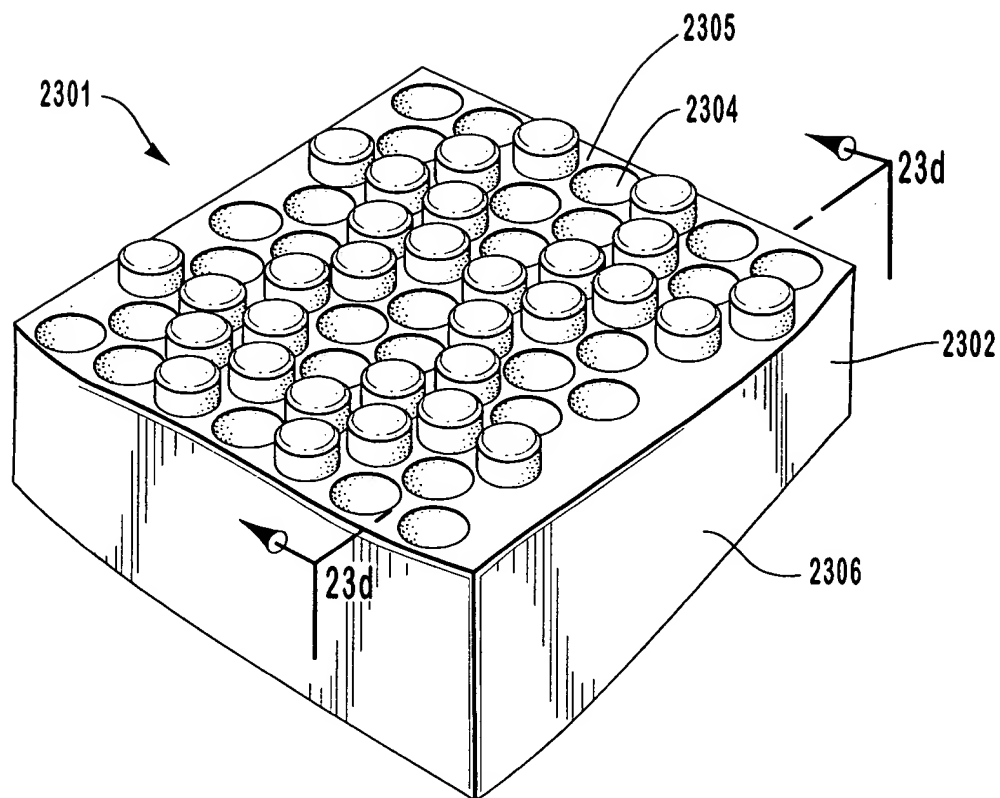


FIG. 23c

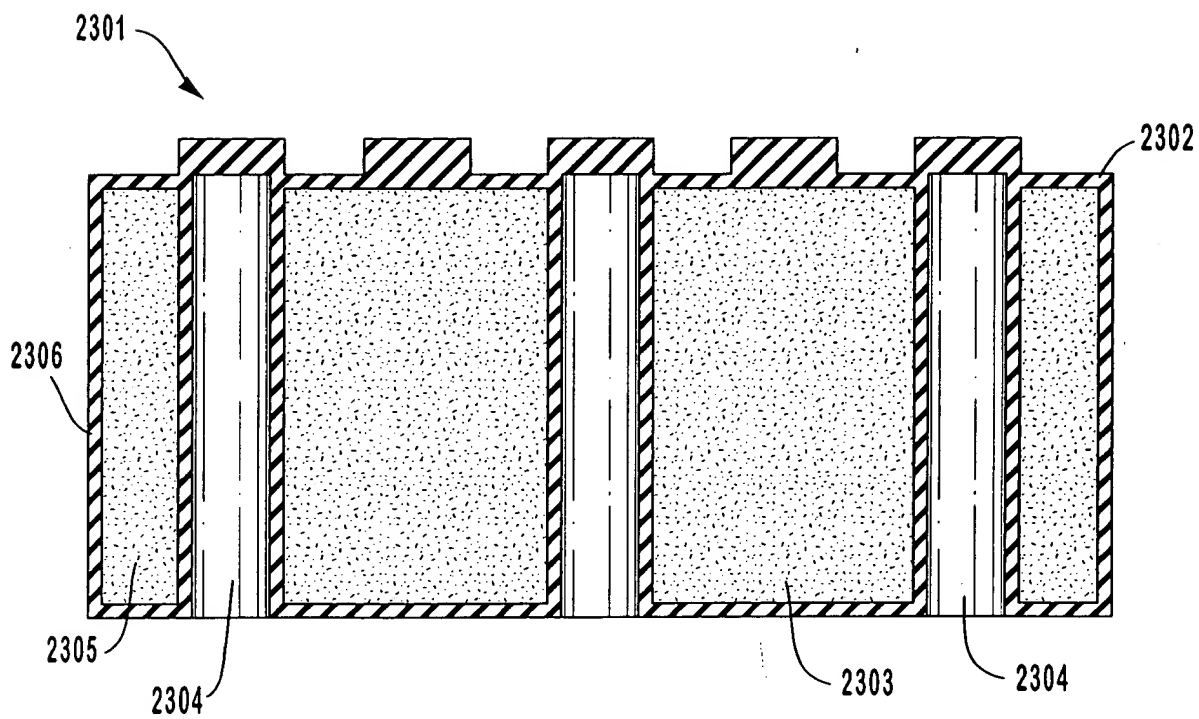


FIG. 23d



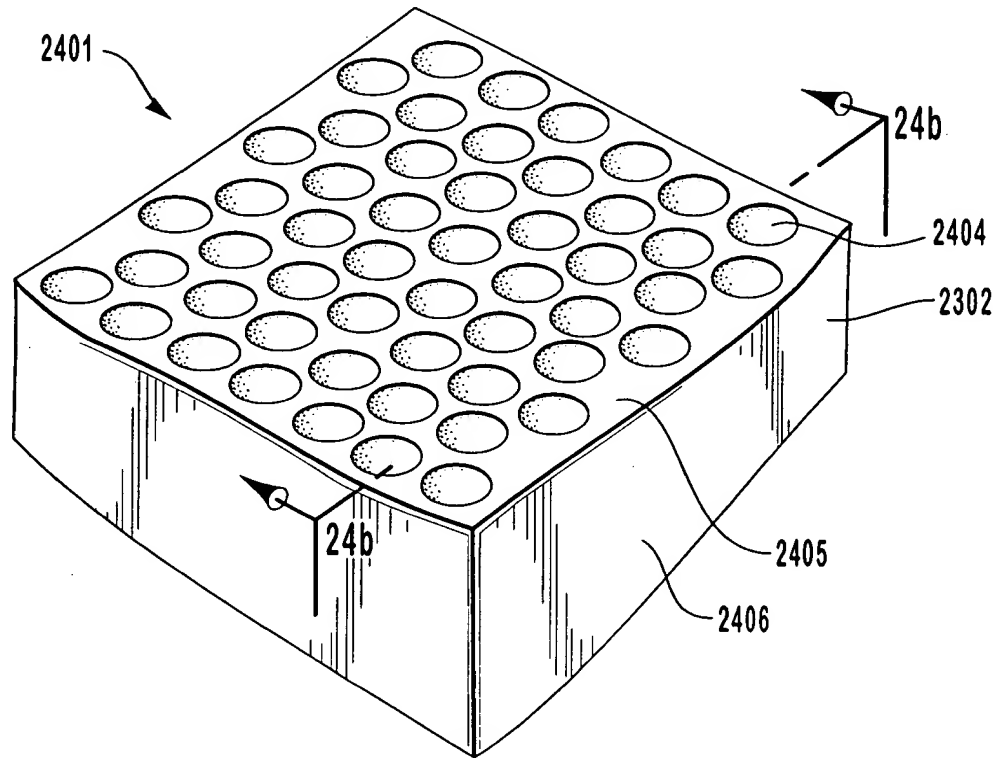


FIG. 24a

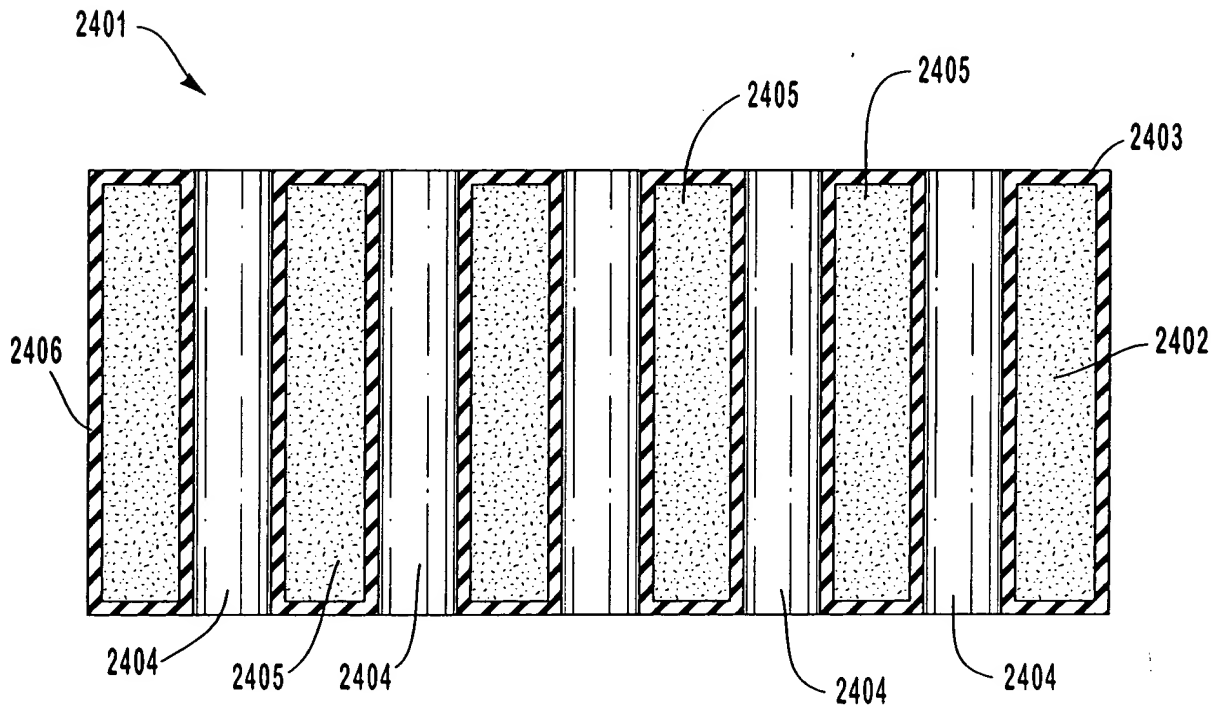


FIG. 24b

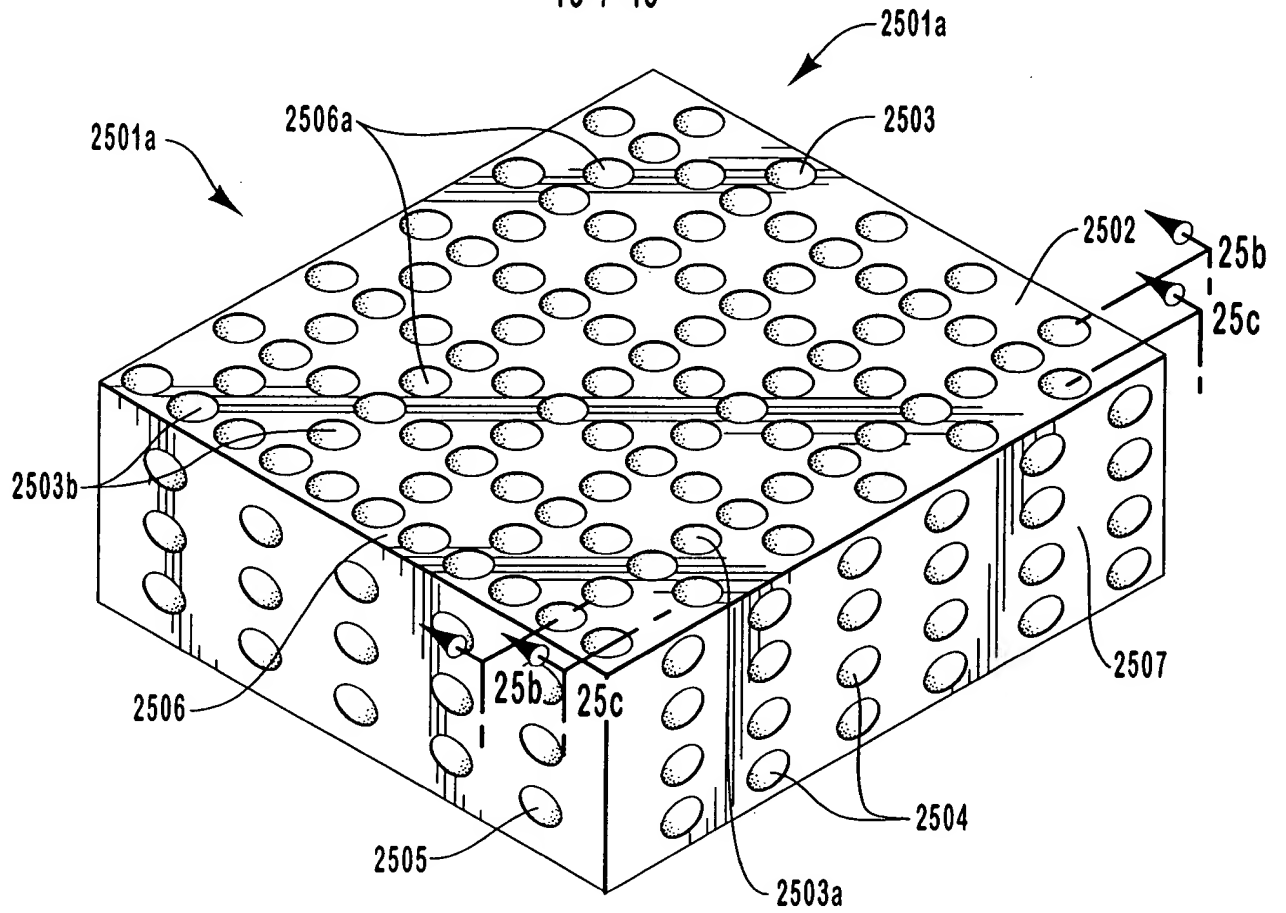


FIG. 25a

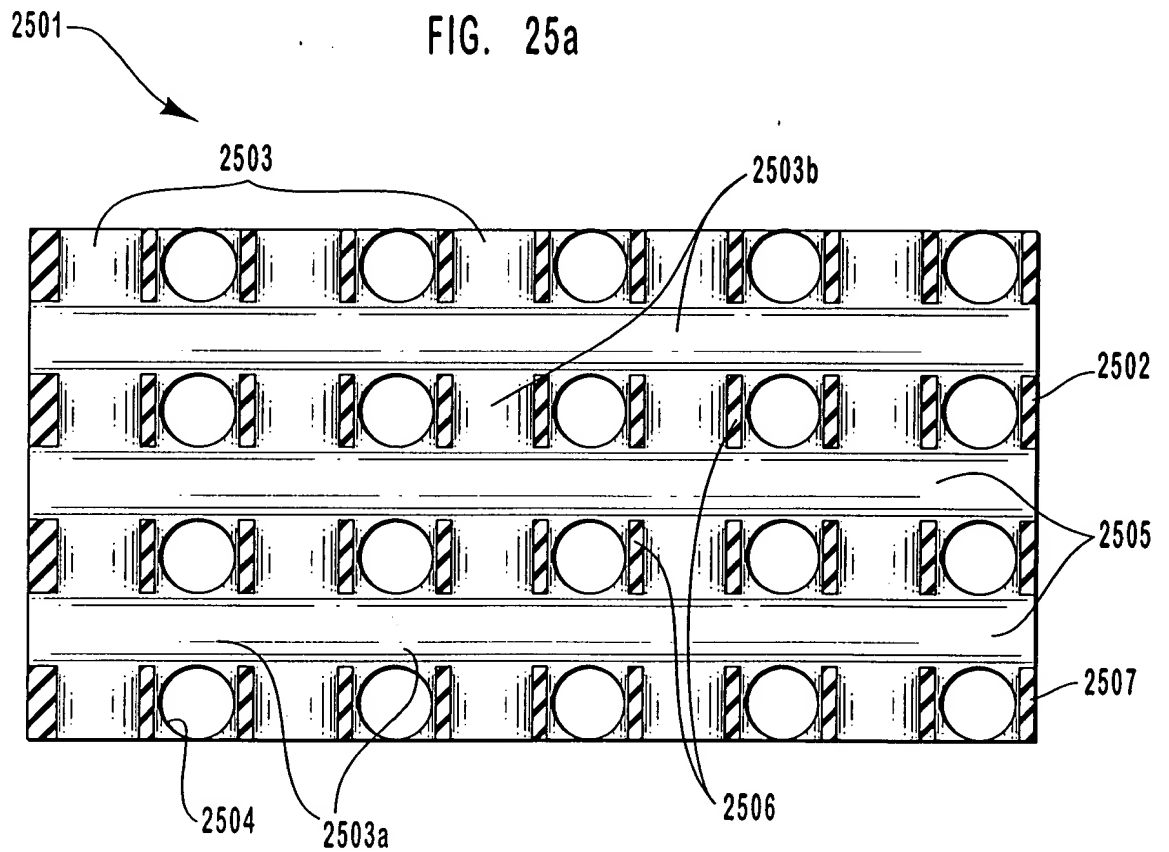
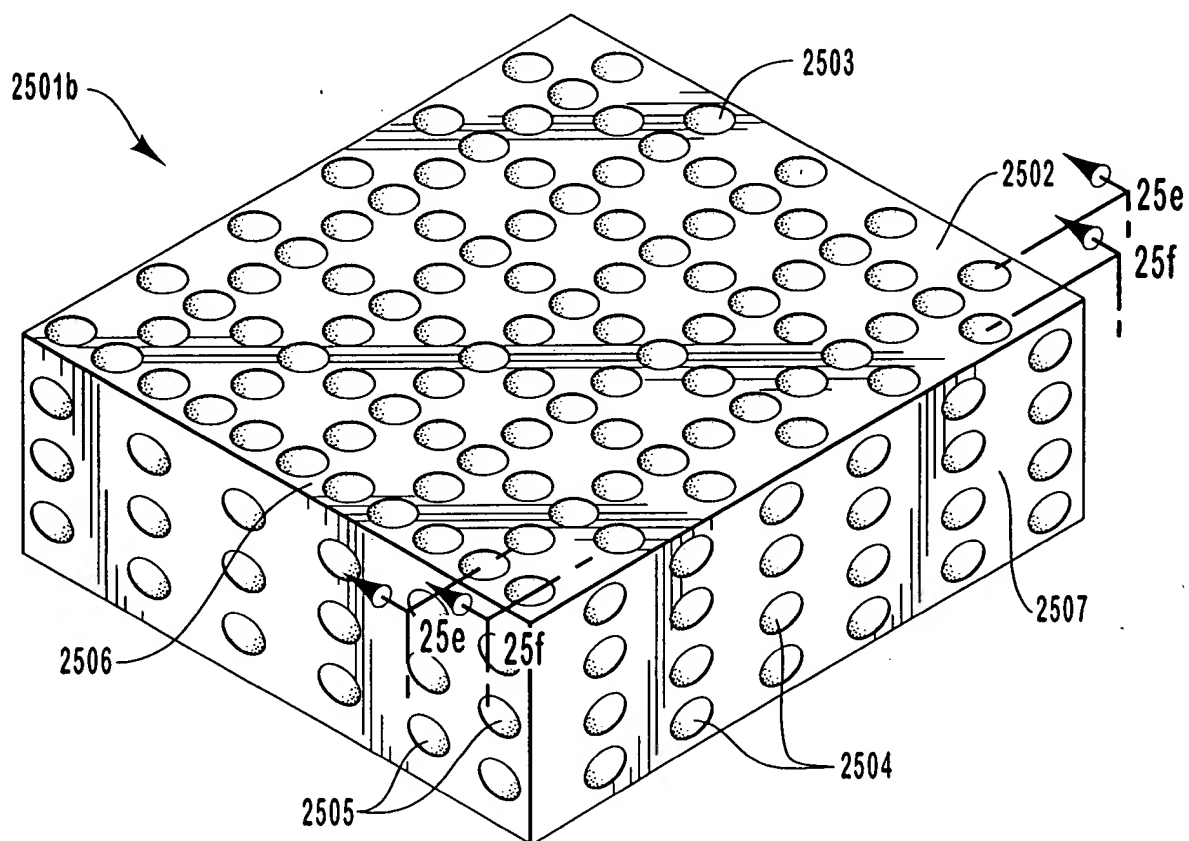
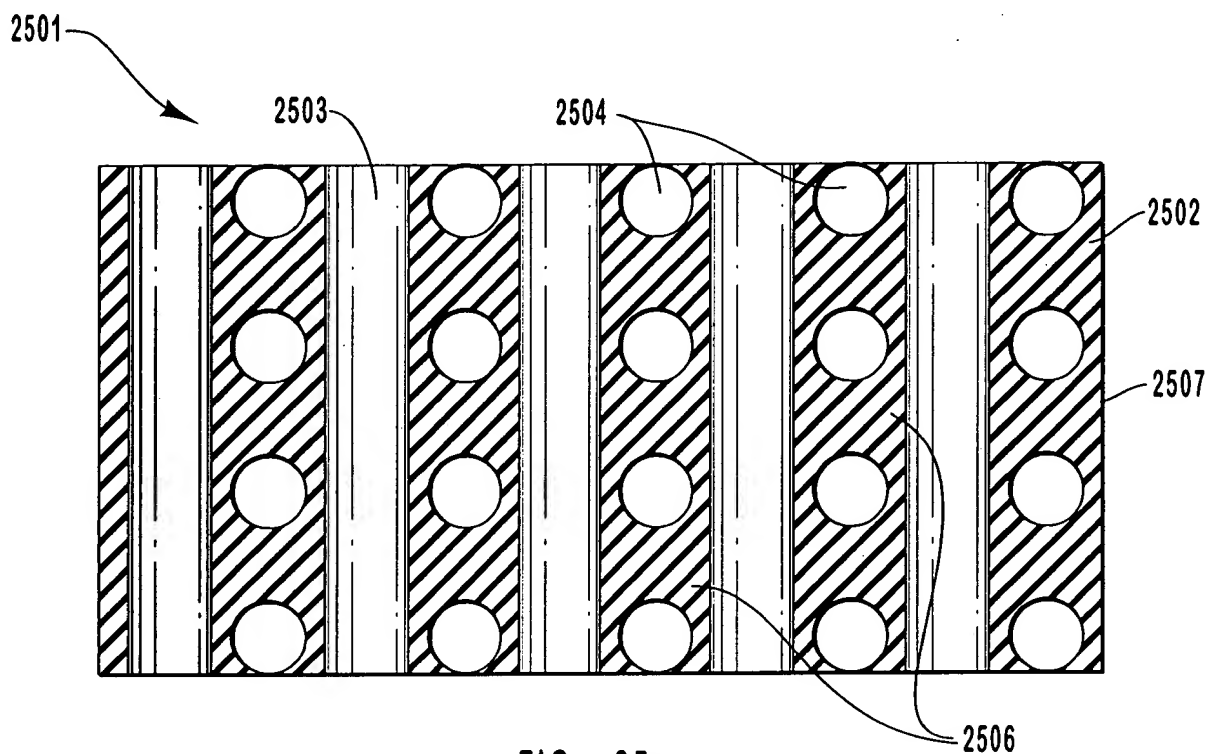


FIG. 25b



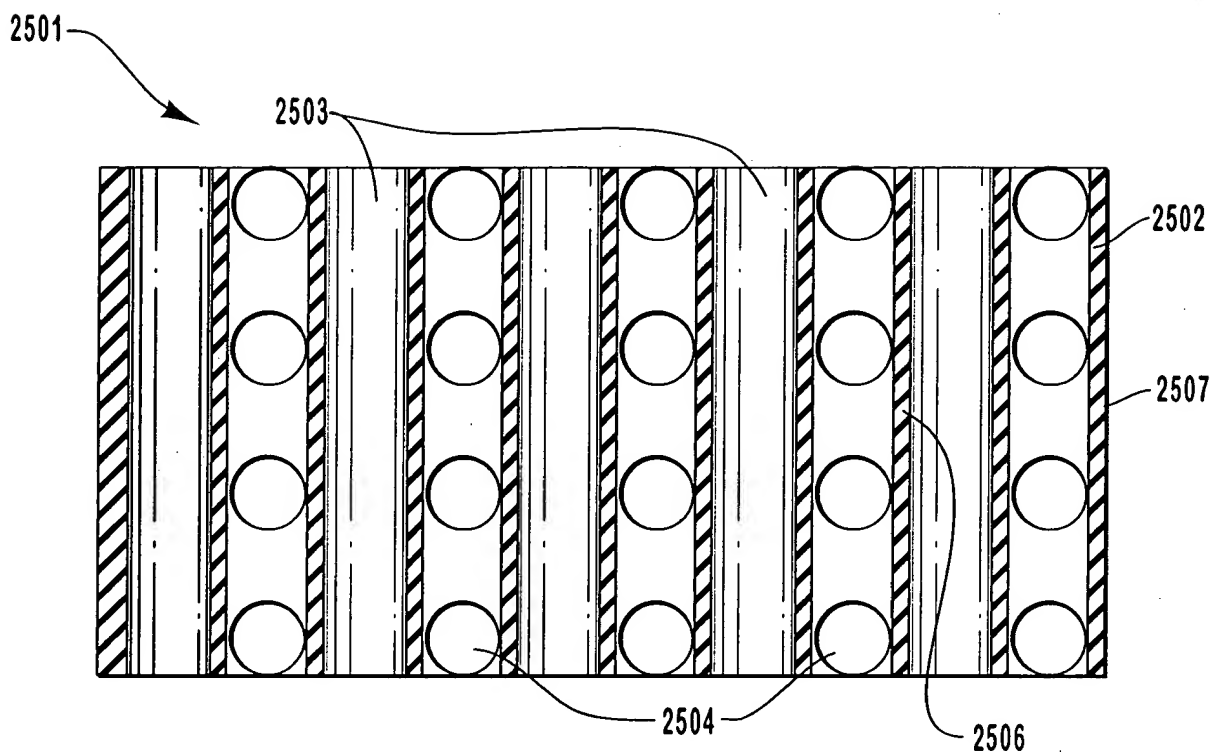


FIG. 25e

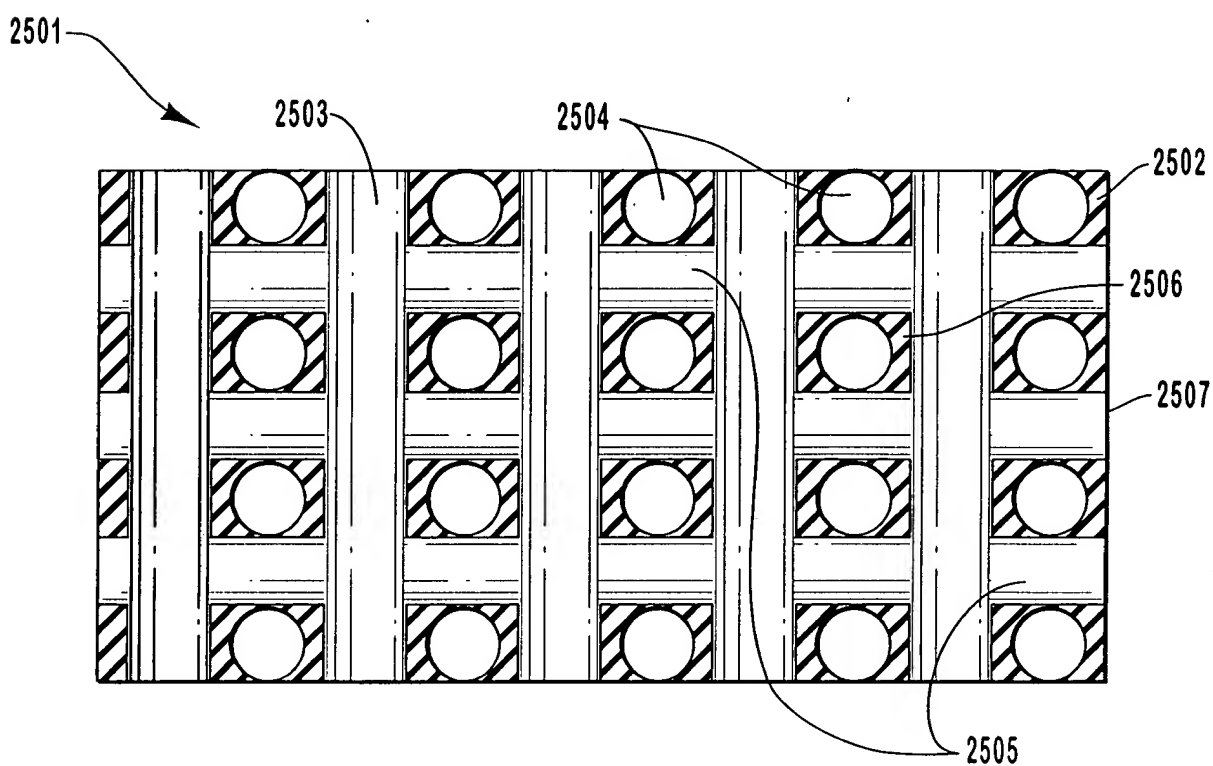


FIG. 25f

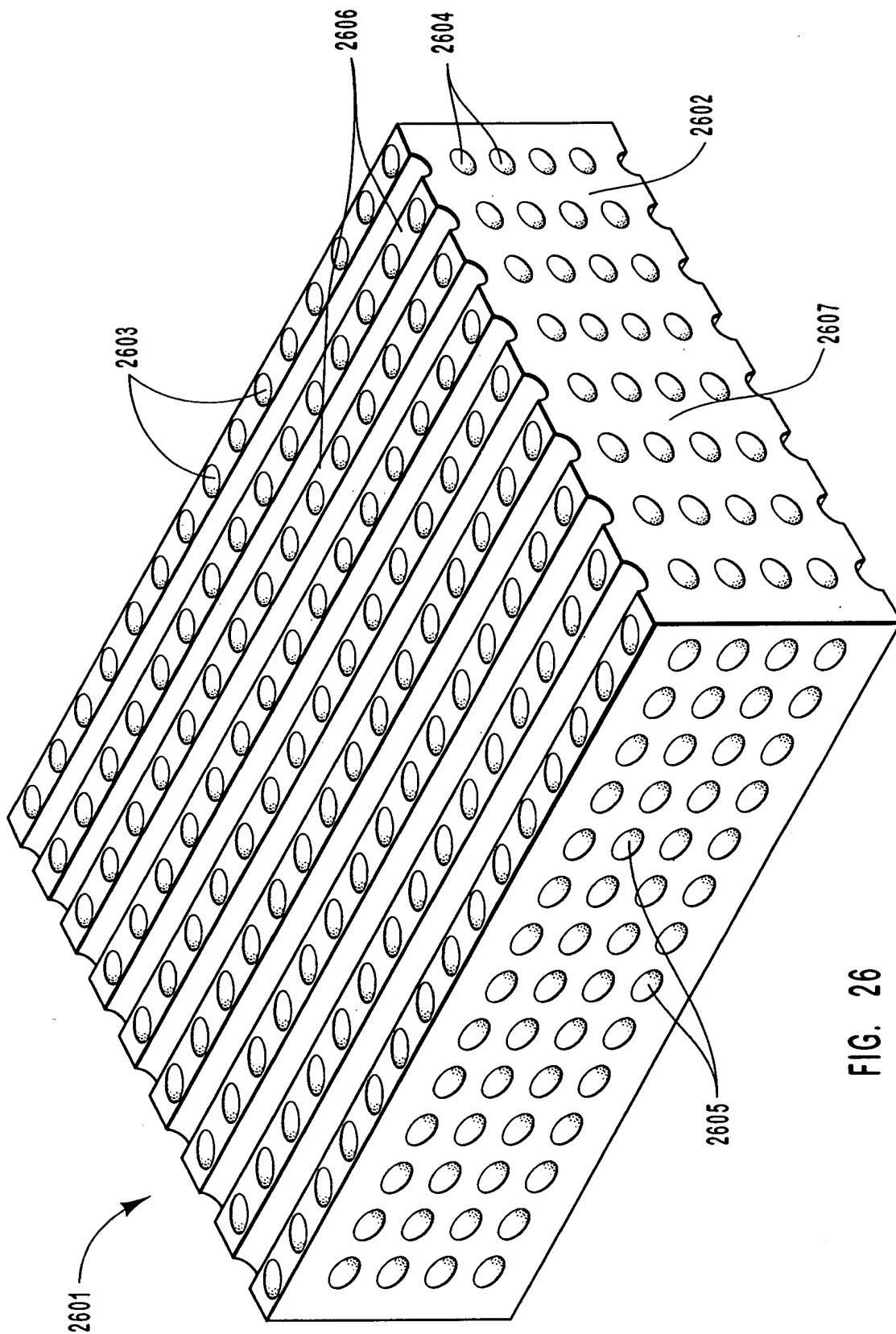


FIG. 26

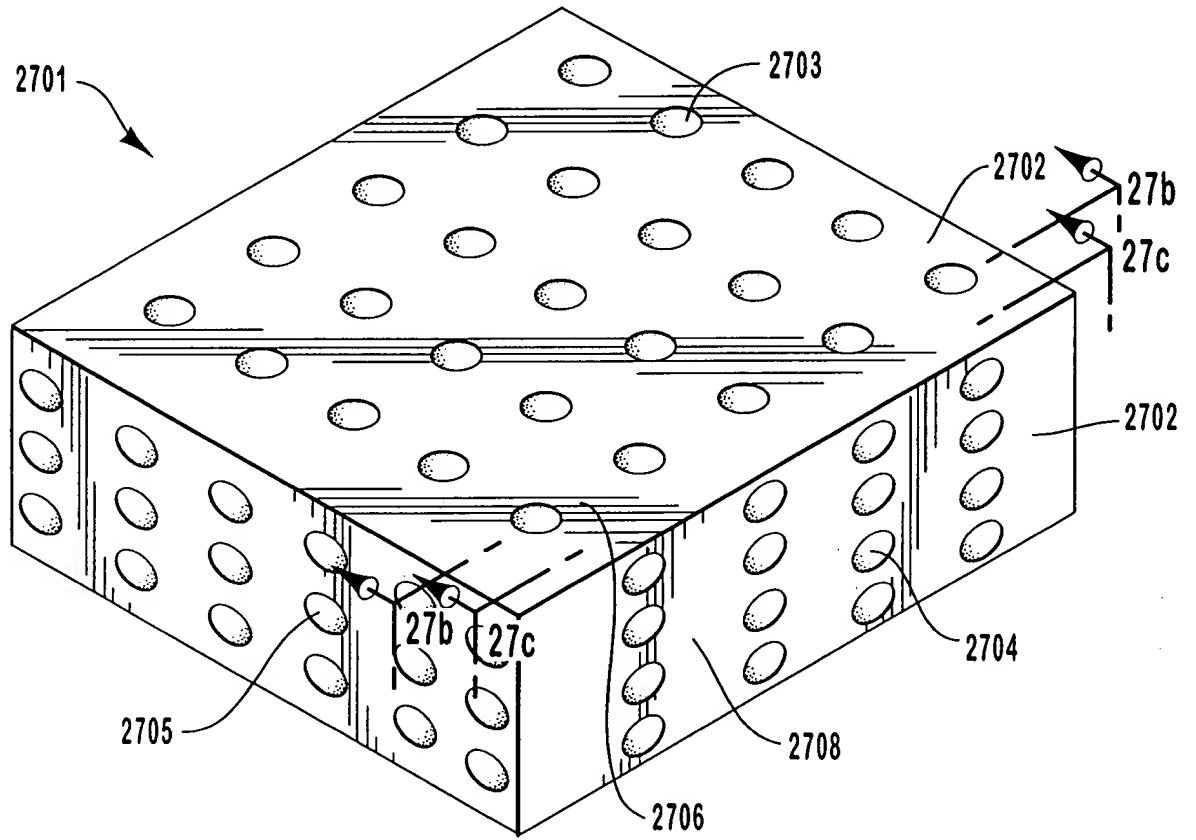


FIG. 27a

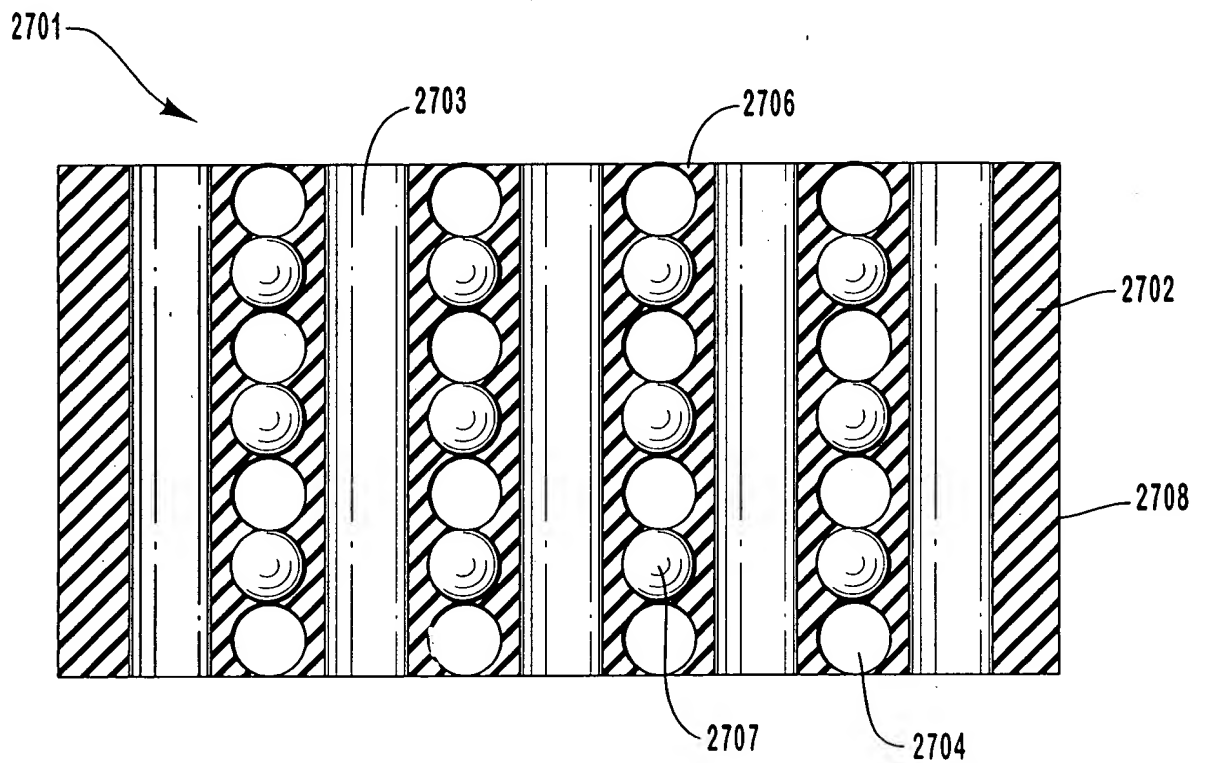


FIG. 27b

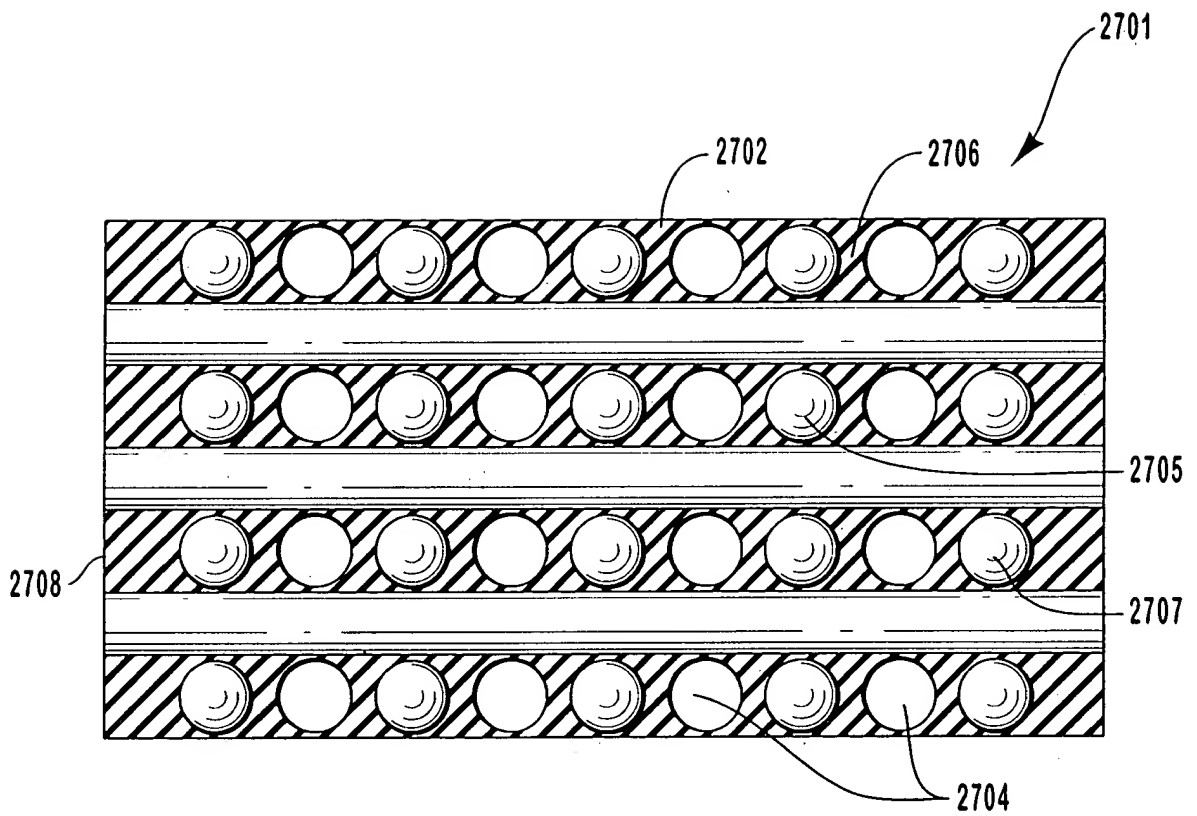


FIG. 27c

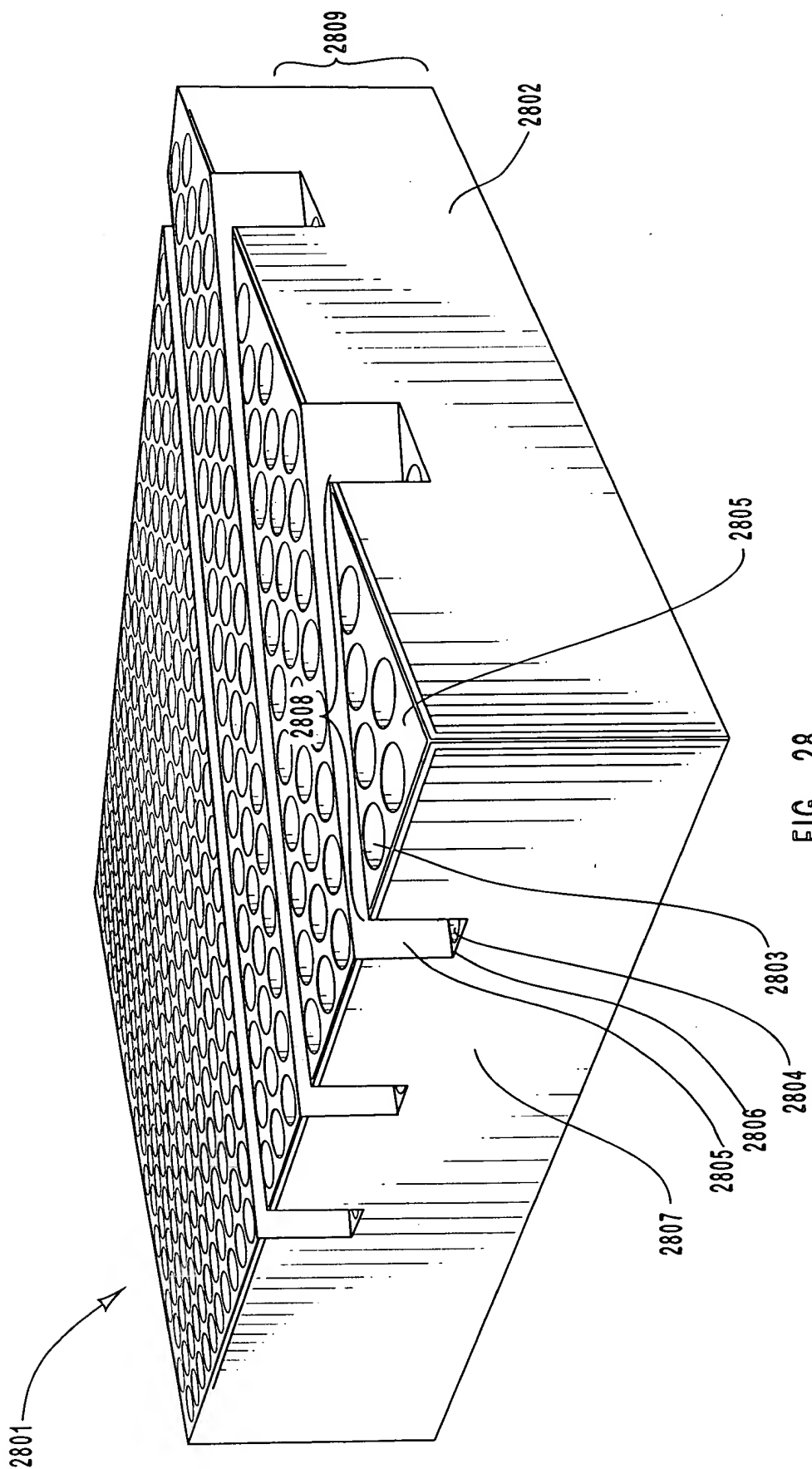


FIG. 28



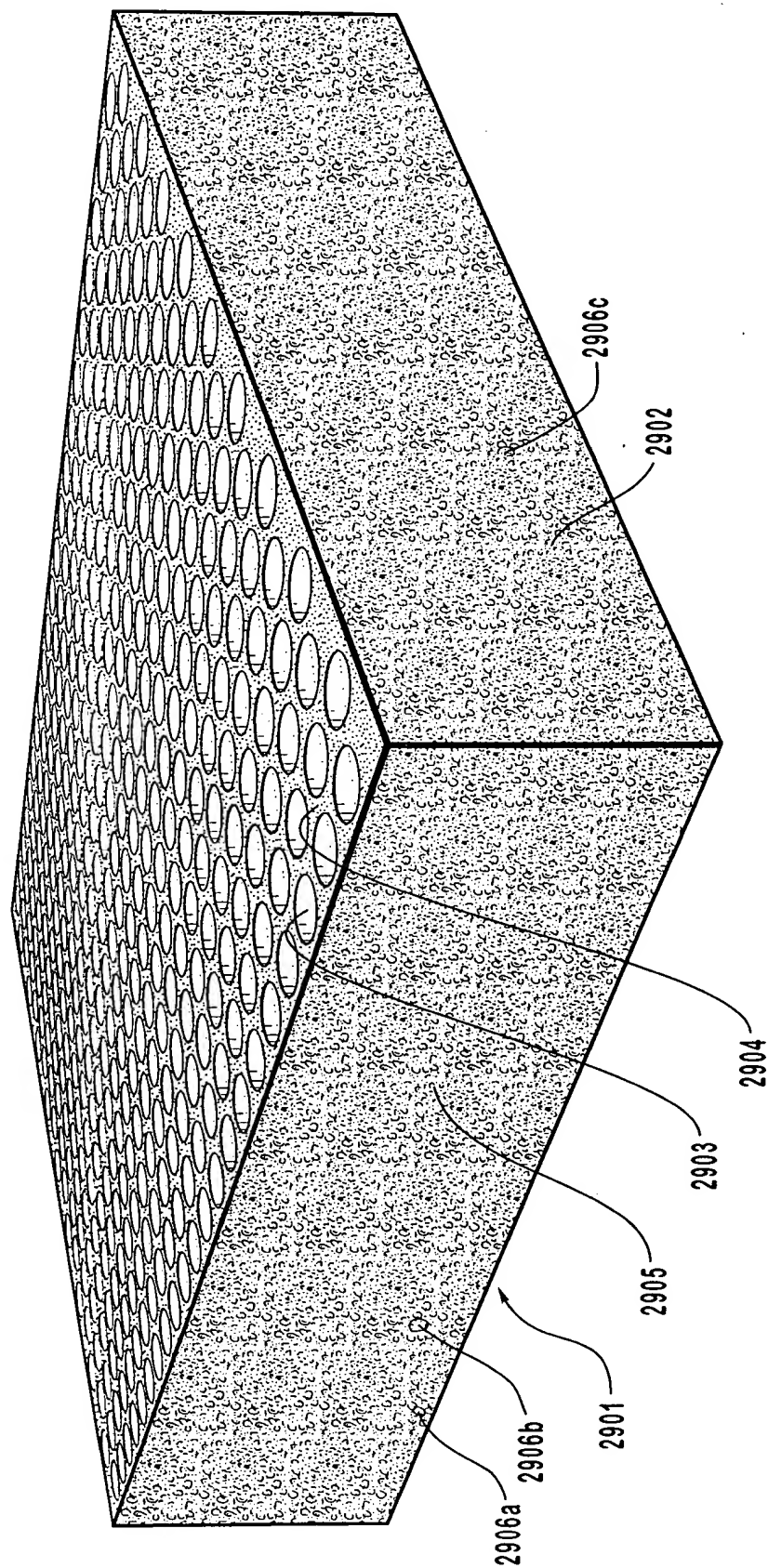


FIG. 29

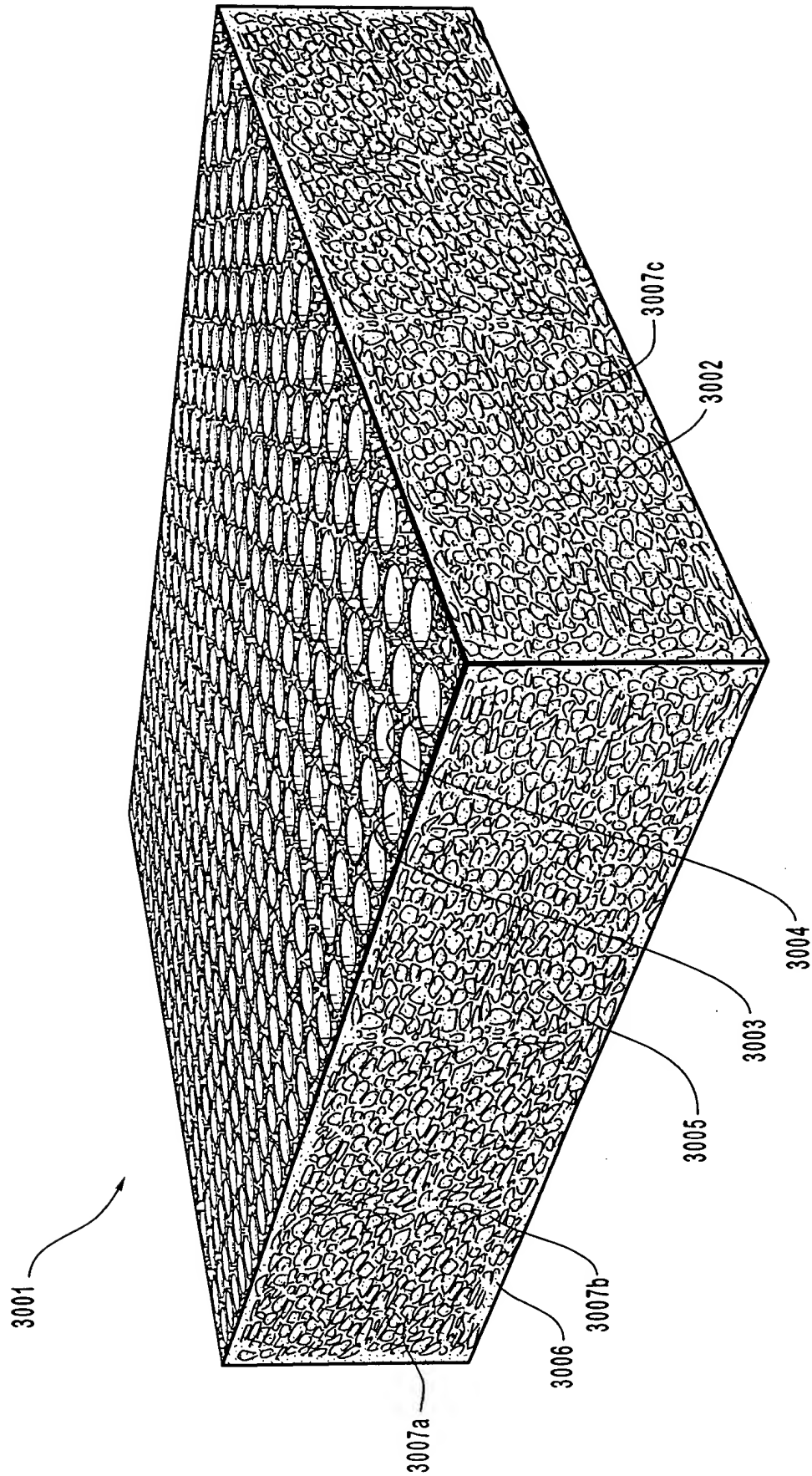


FIG. 30a

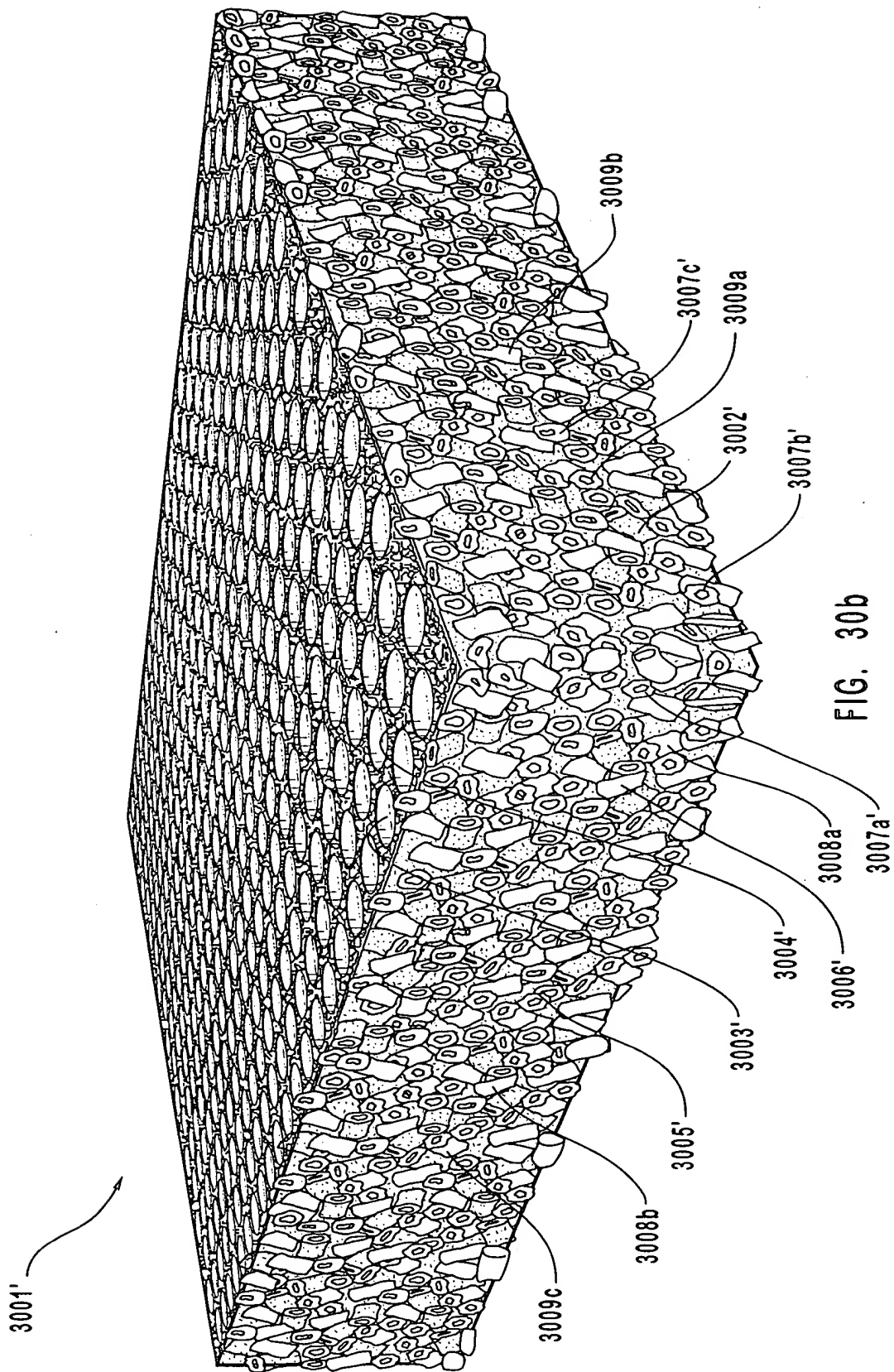


FIG. 30b

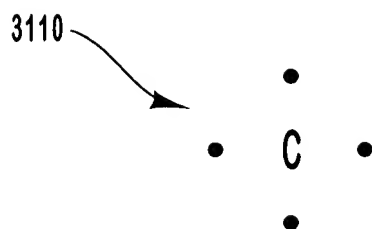


FIG. 31a

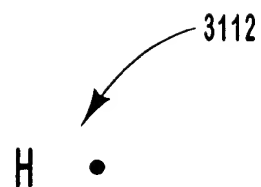


FIG. 31b

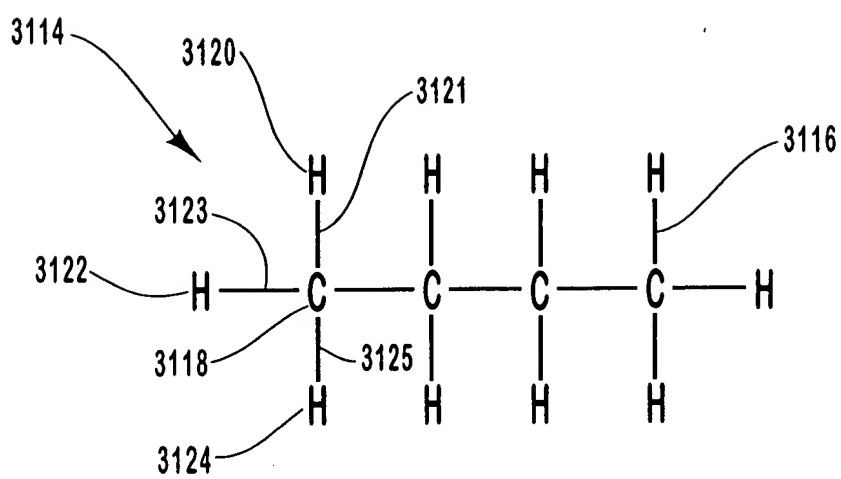


FIG. 31c

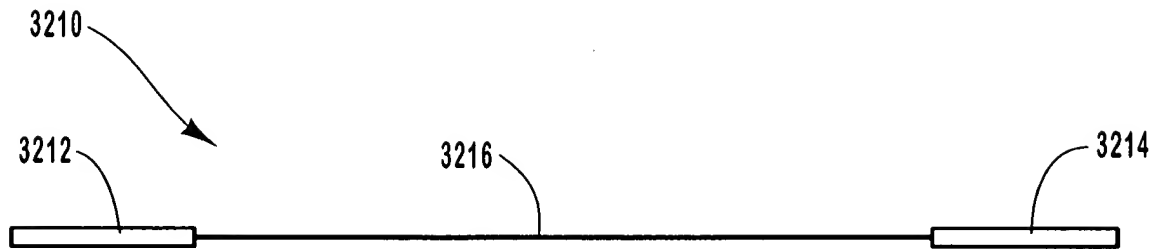


FIG. 32a

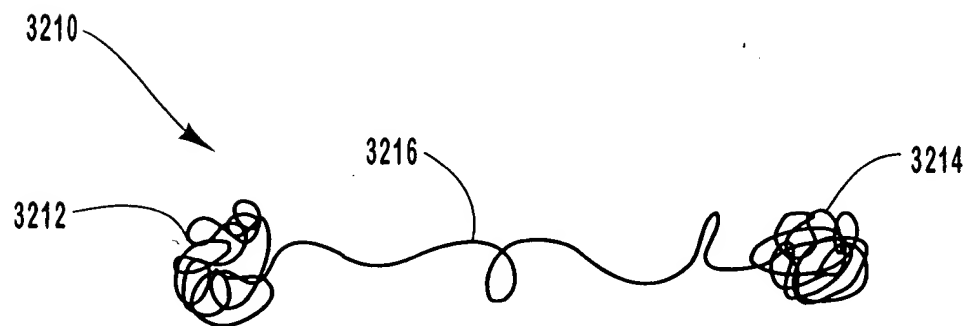


FIG. 32b

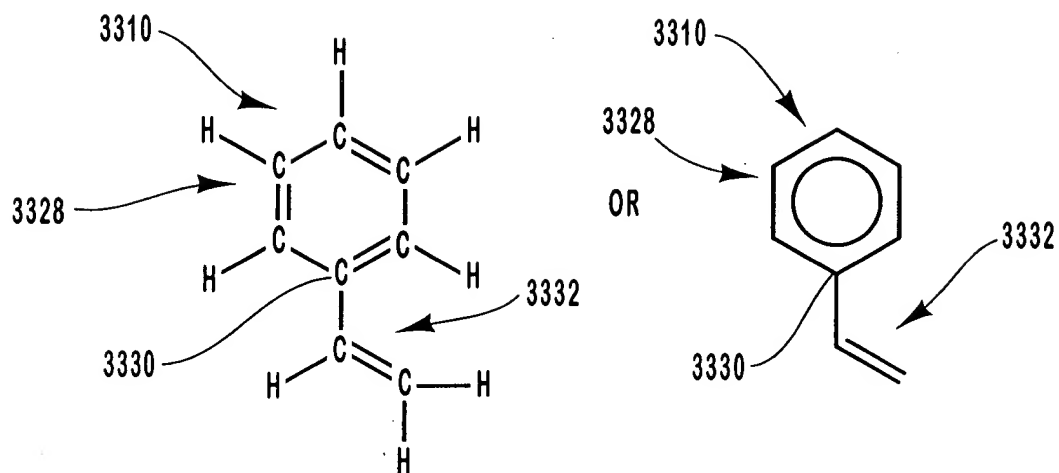


FIG. 33a

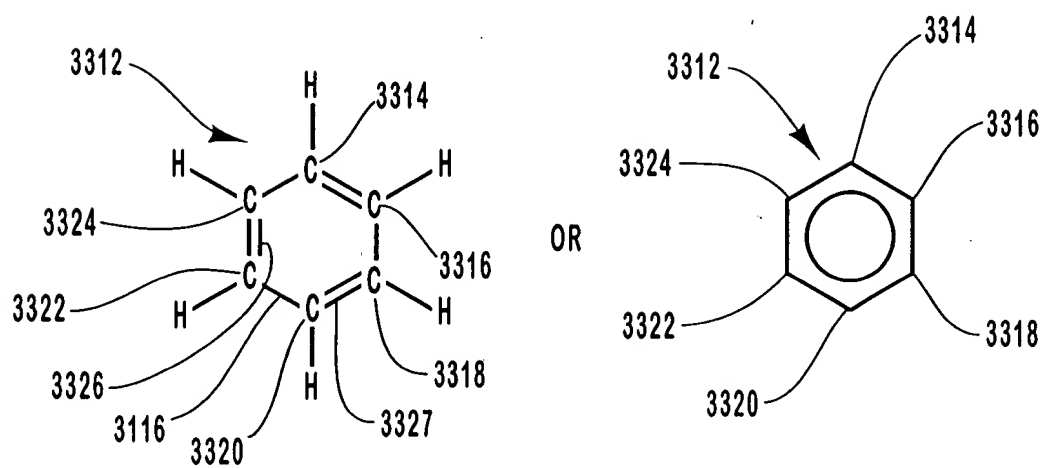


FIG. 33b

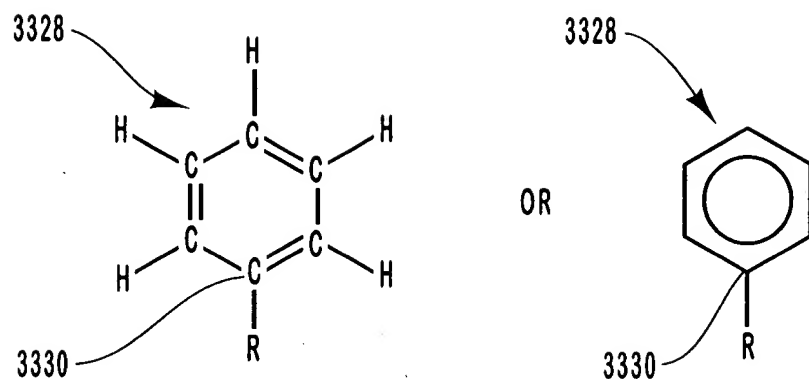


FIG. 33c

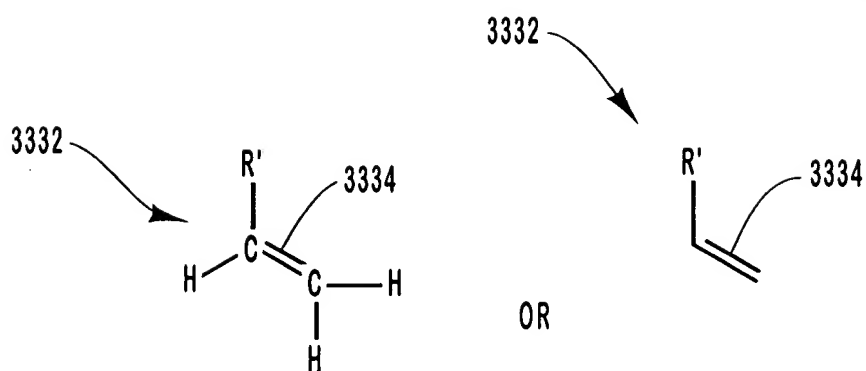


FIG. 33d

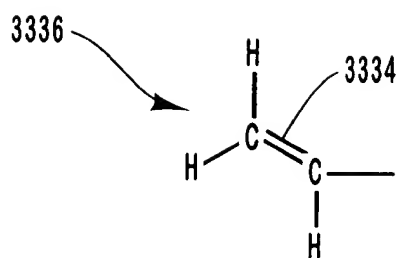


FIG. 33e

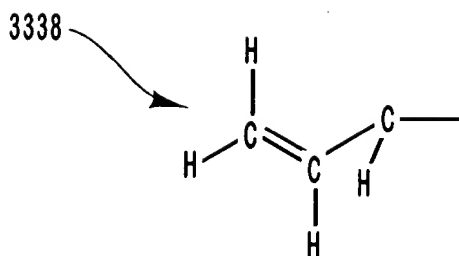


FIG. 33f



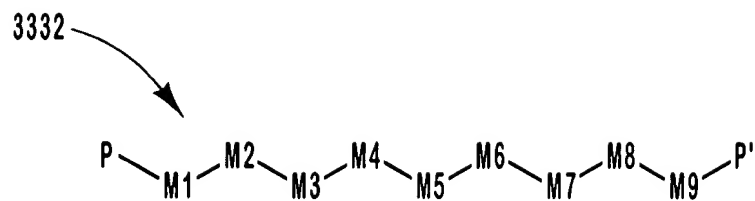


FIG. 34a

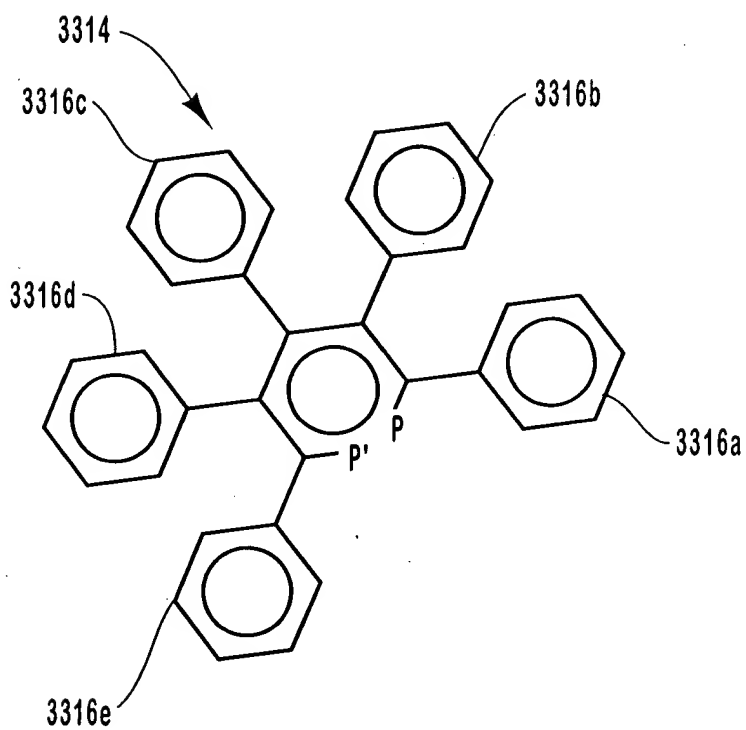


FIG. 34b

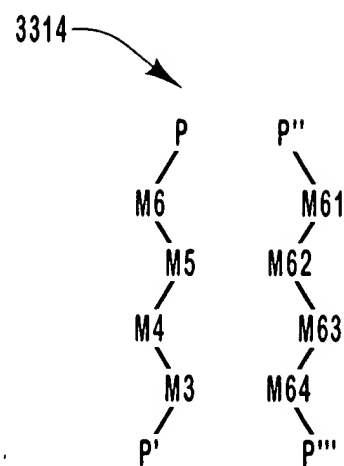


FIG. 34c

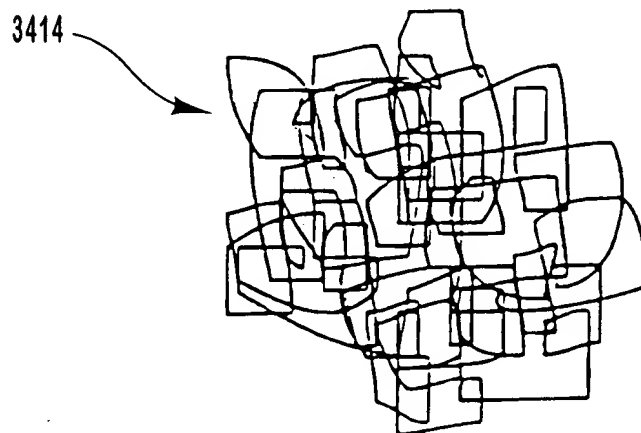


FIG. 34d

662050 62600000

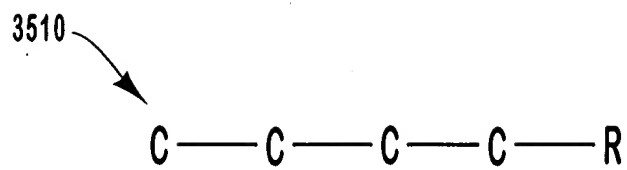


FIG. 35a

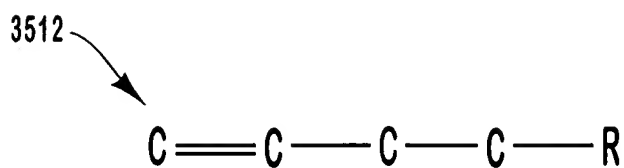


FIG. 35b

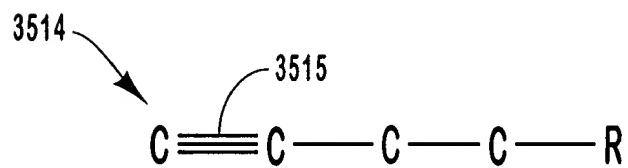


FIG. 35c

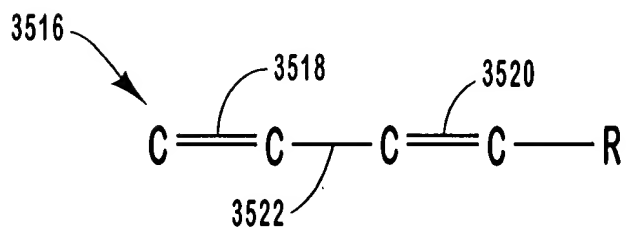


FIG. 35d

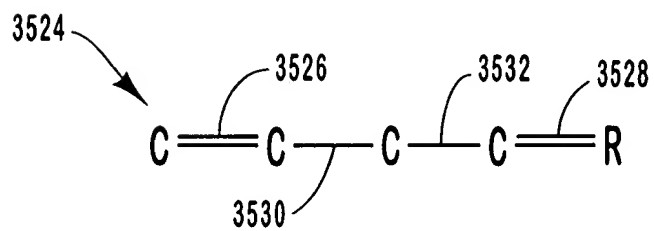


FIG. 35e

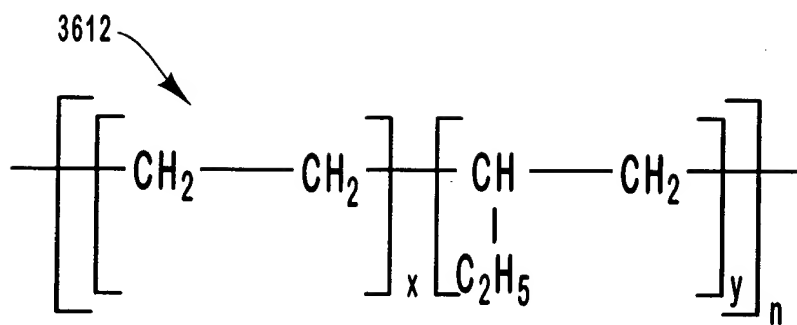


FIG. 36a

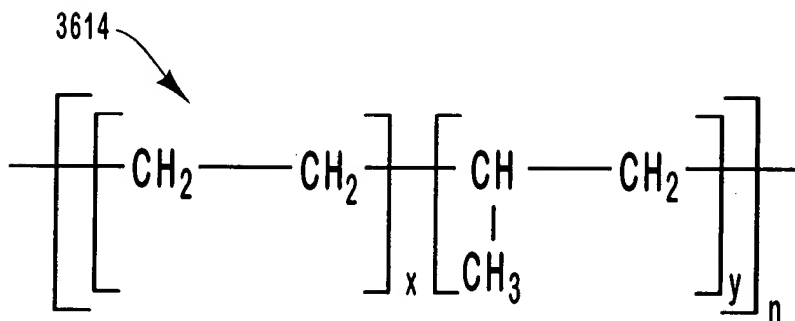


FIG. 36b

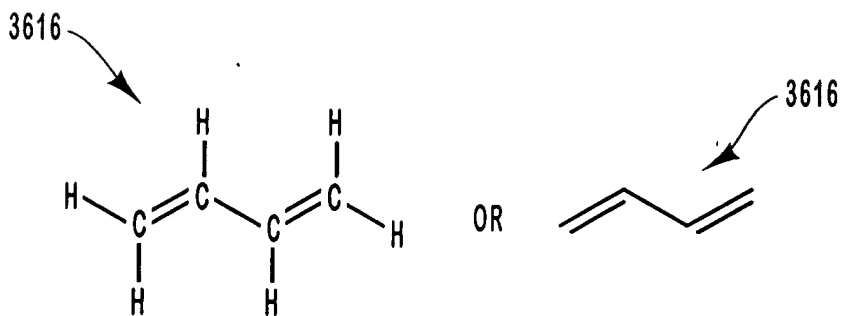


FIG. 36c

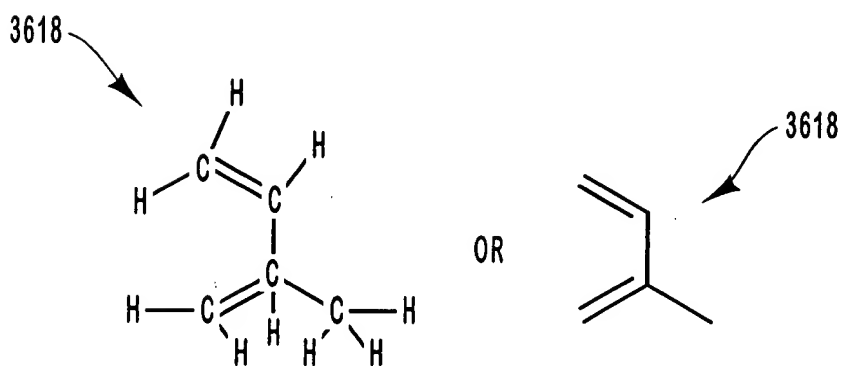


FIG. 36d

662050-62622260

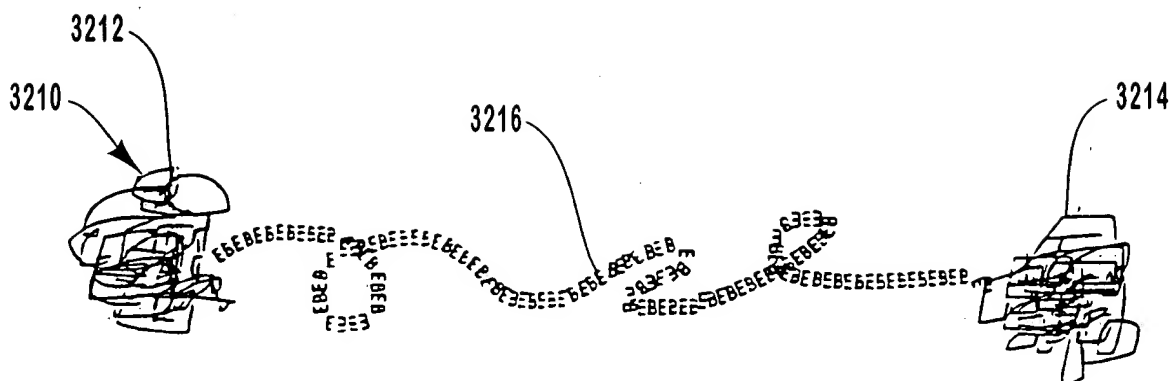


FIG. 37a

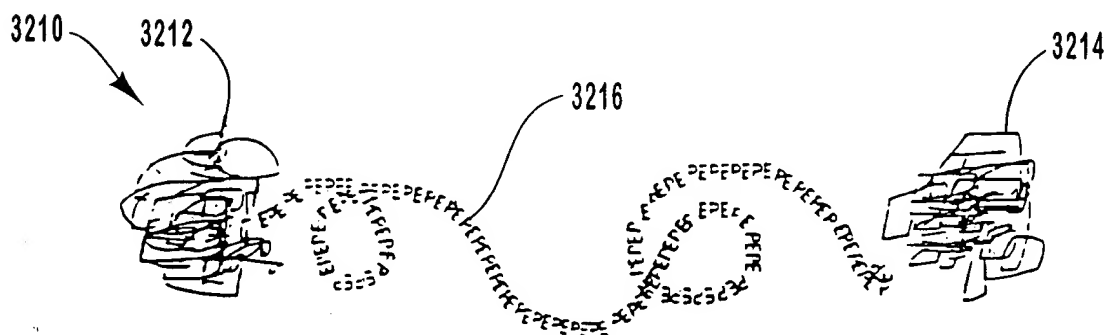


FIG. 37b

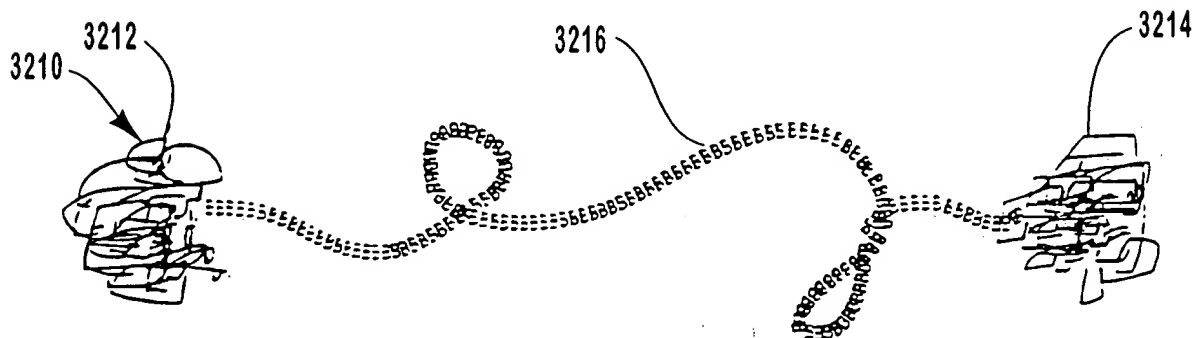
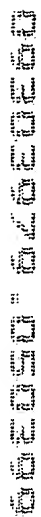
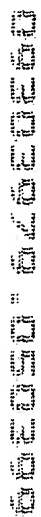
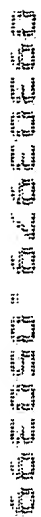


FIG. 37c

662050-6260260

[illegible][illegible][illegible]

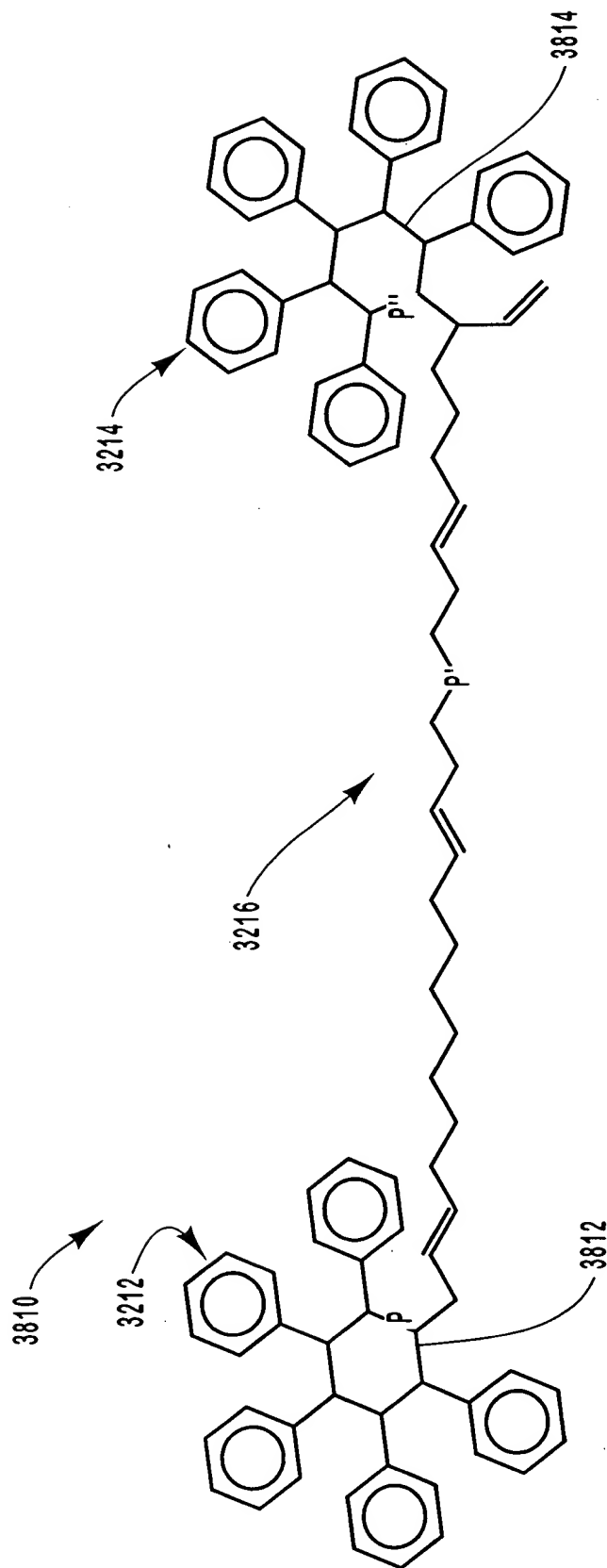


FIG. 38a

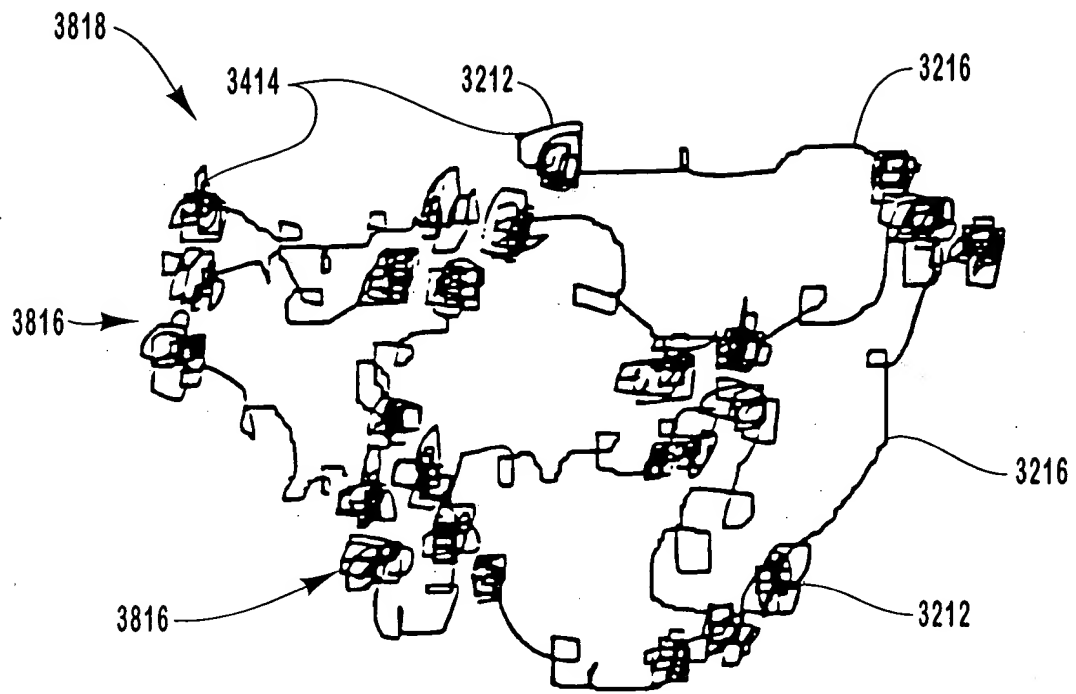


FIG. 38b

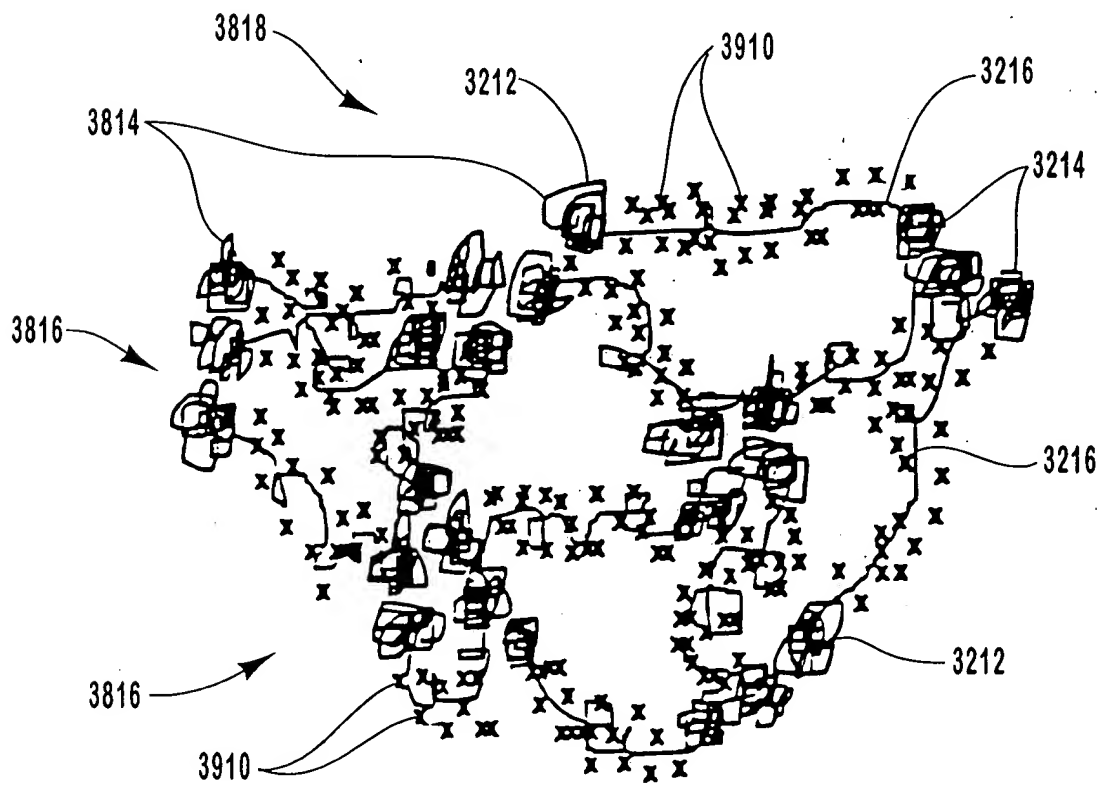


FIG. 39a

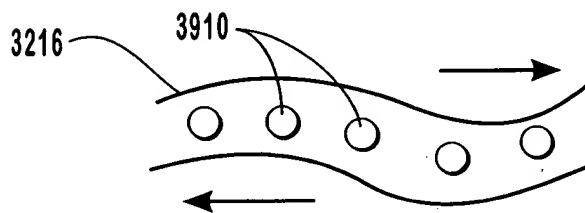


FIG. 39b

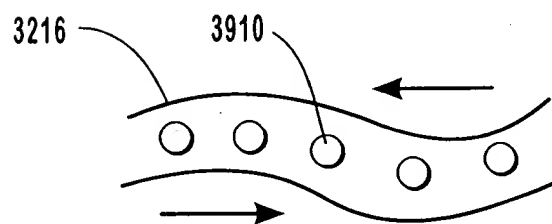


FIG. 39c

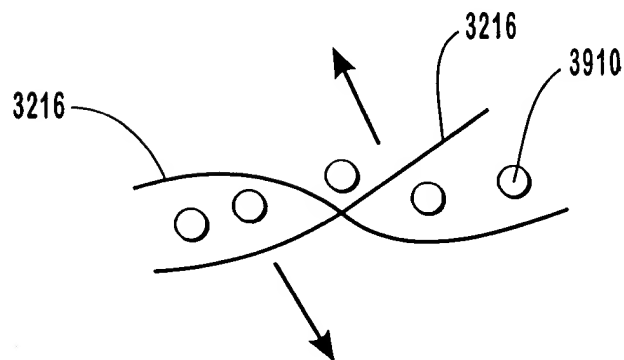


FIG. 39d

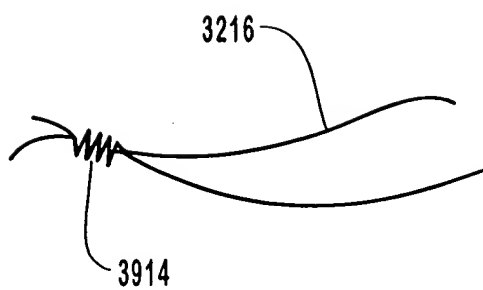


FIG. 39e

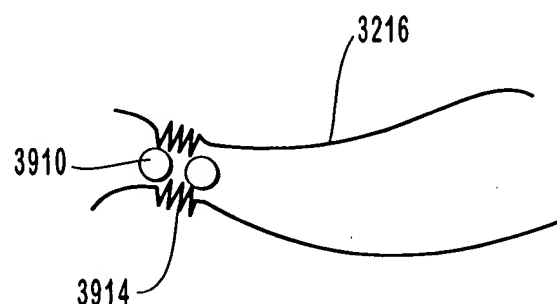


FIG. 39f



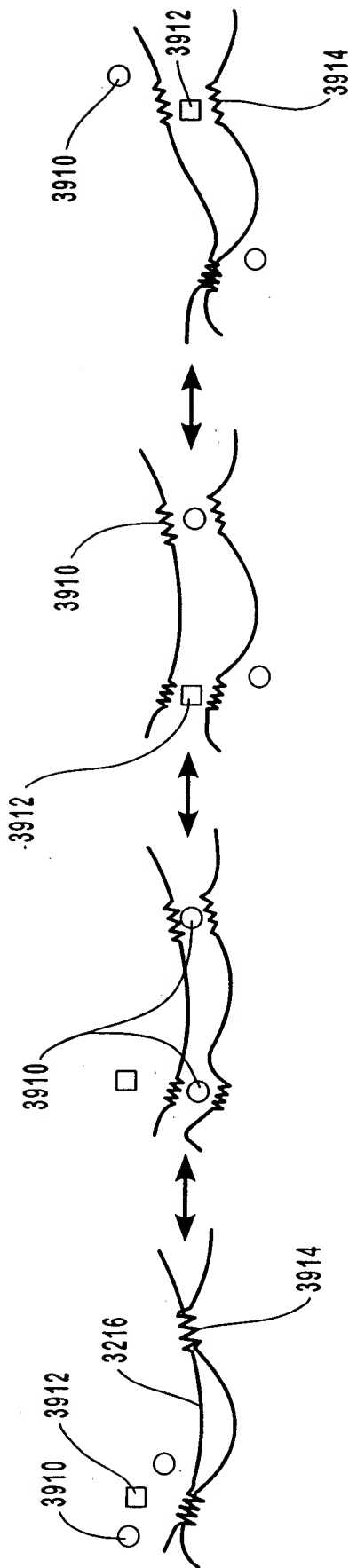


FIG. 39g

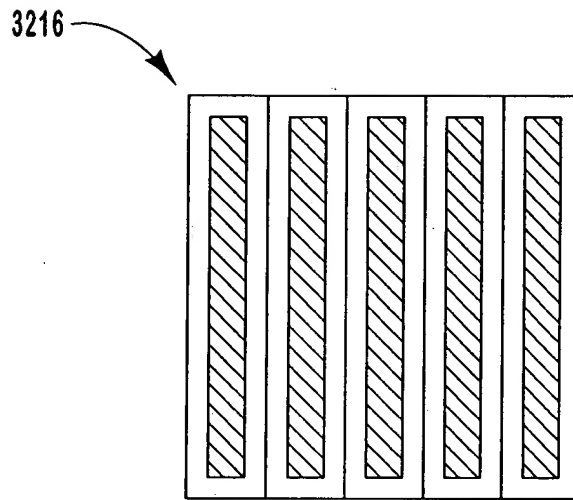


FIG. 39h

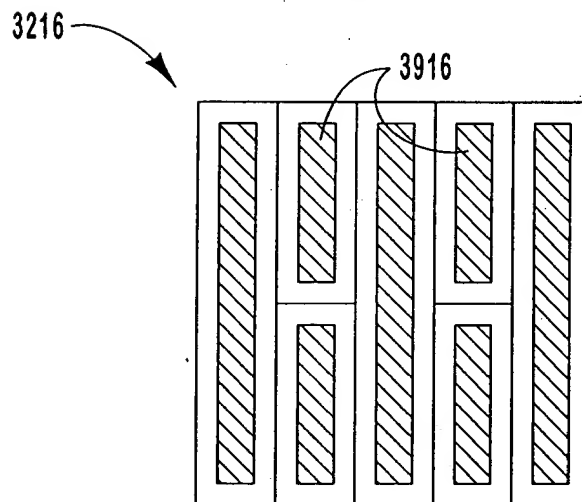
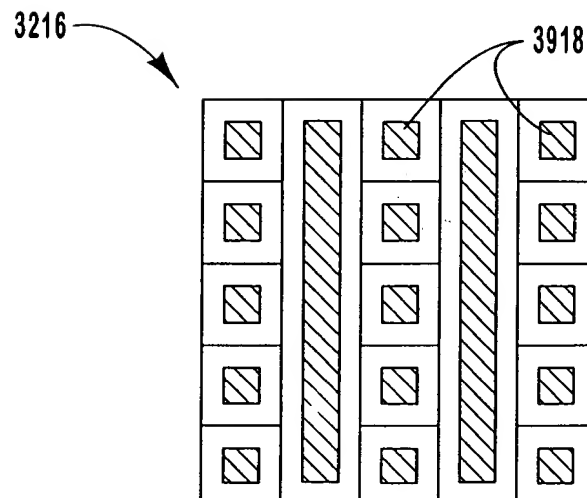


FIG. 39i



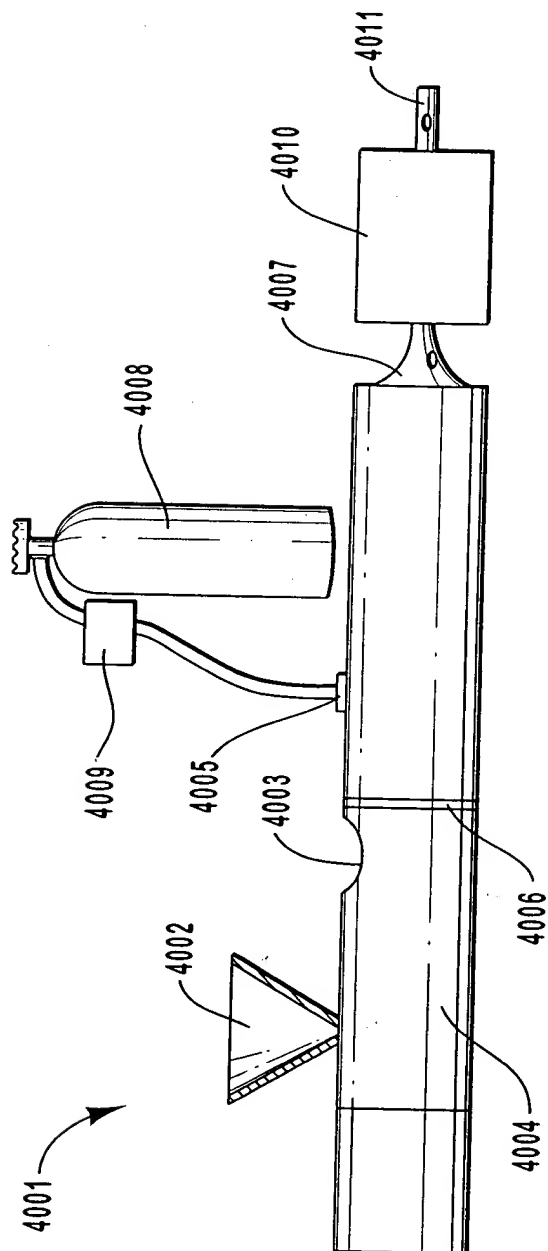


FIG. 40a

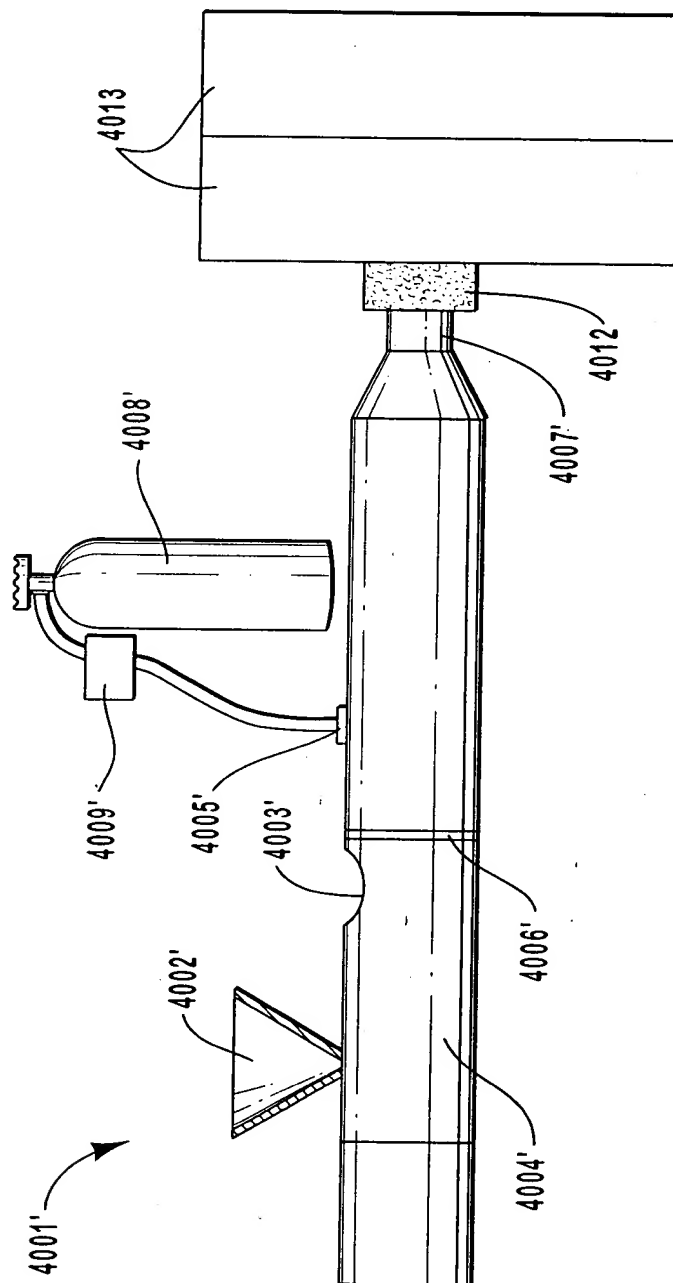


FIG. 40b

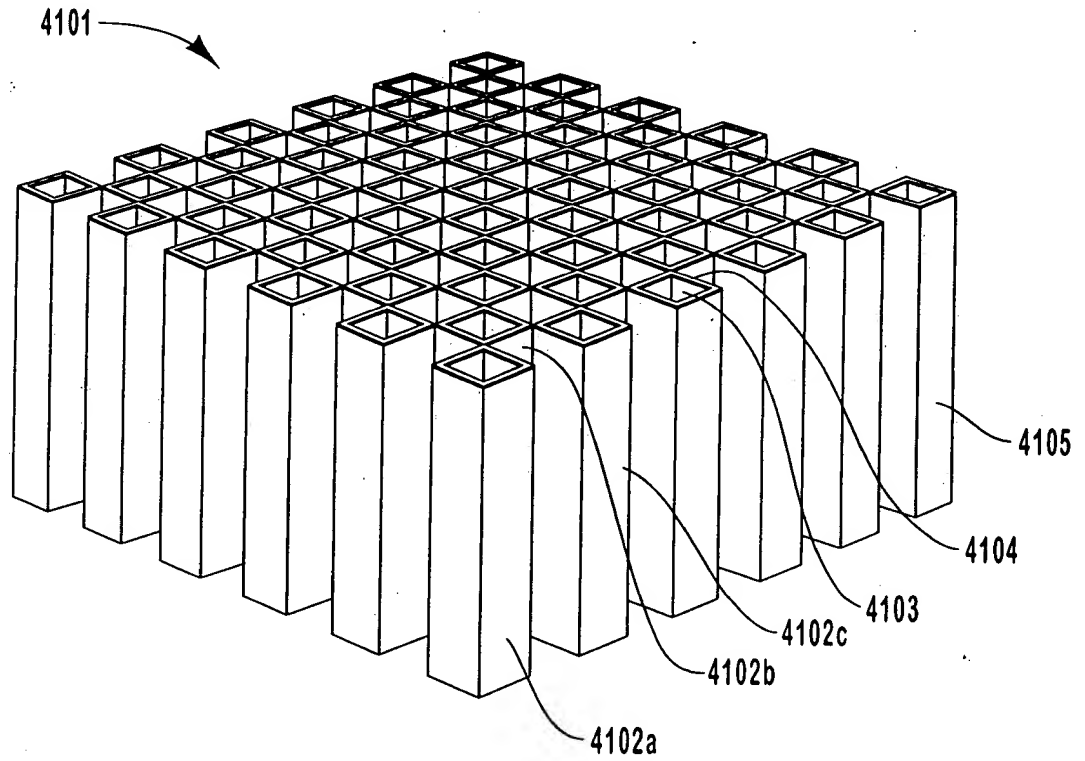


FIG. 41

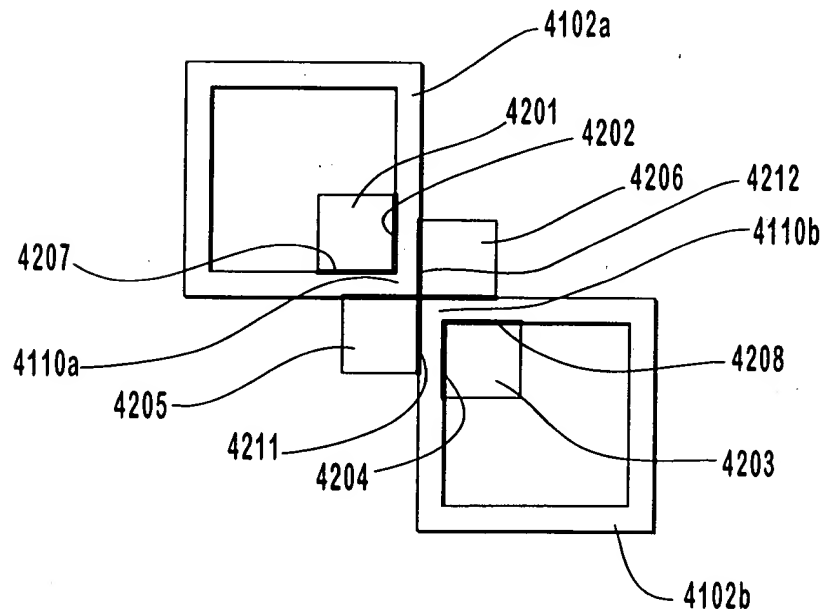


FIG. 42

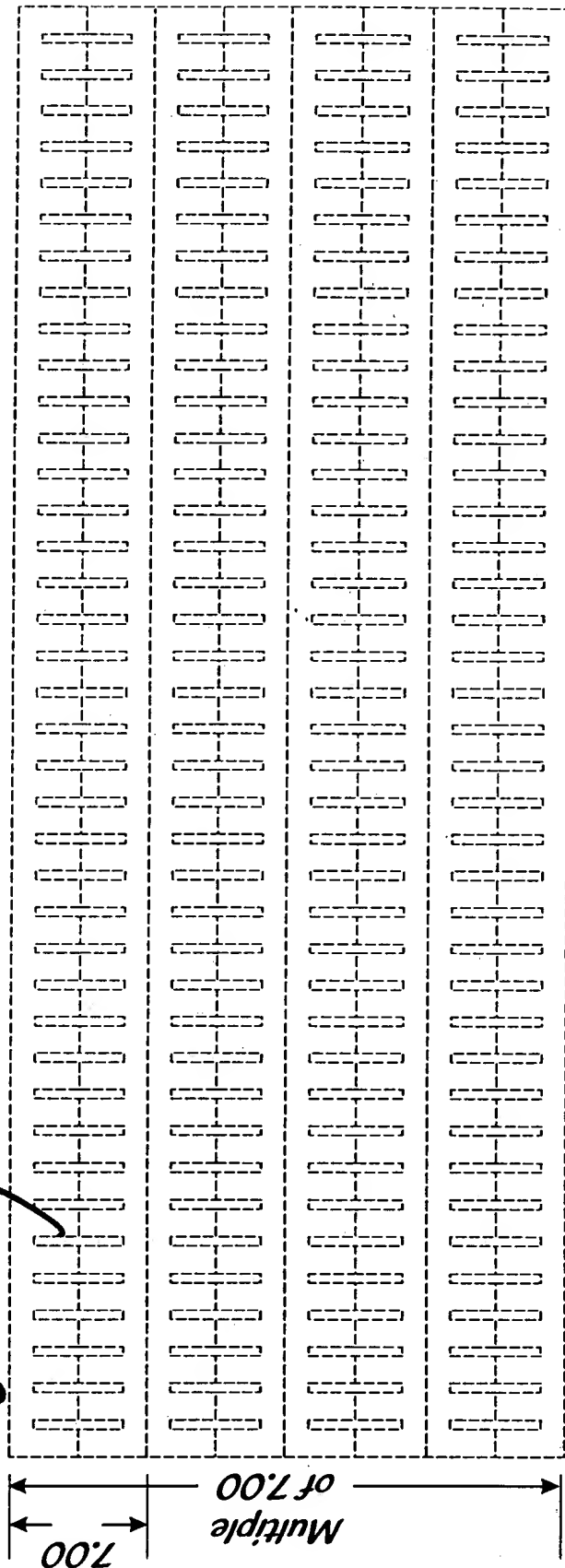
66E050 62E0E0E0

FIGURE ~~42~~ 43

4301

4302

Step 1: Cut foam bun (along dashed lines) with CNC contour cutter



5:18 PM



66E050 66E0E00

# FIGURE ~~45~~ 45

Step 3: Separate the pieces and discard the thin sections

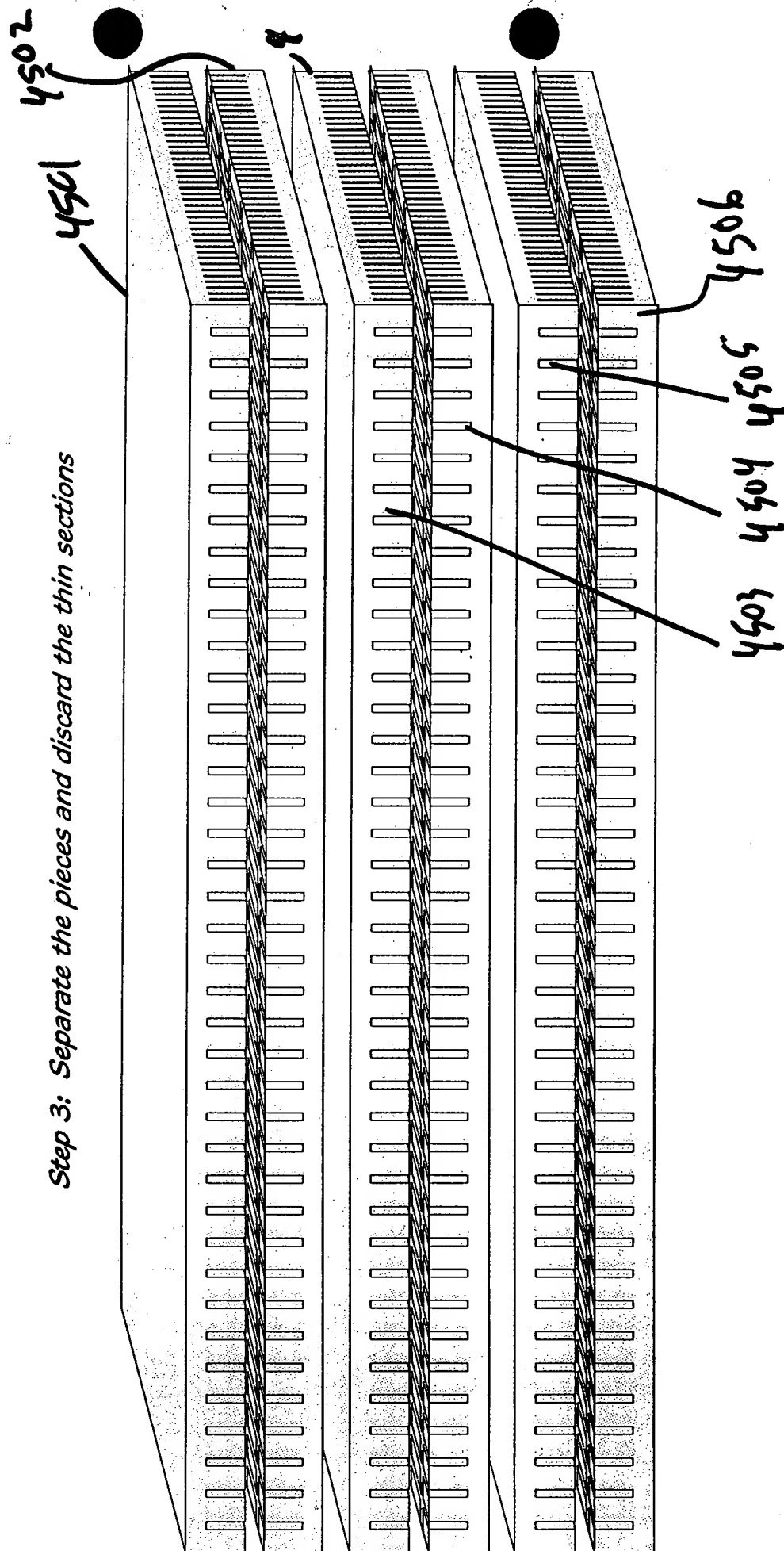
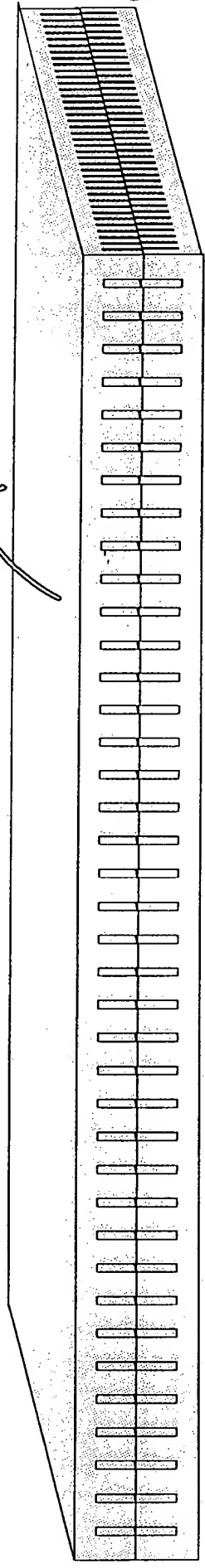




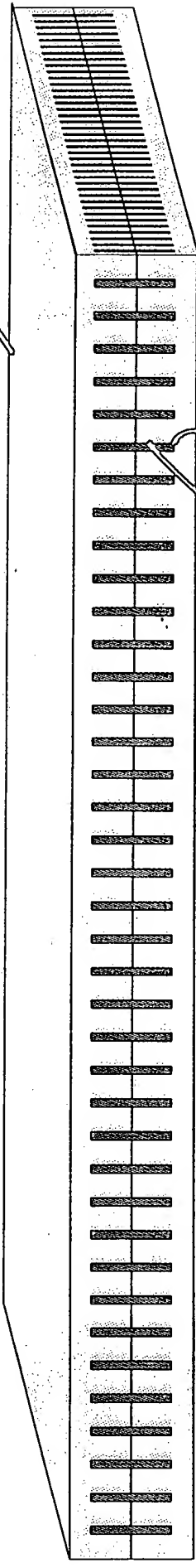
FIGURE 4601

4601

Step 4: Bond with adhesive



Step 5: Insert side support foam pieces (do not bond) all four sides 4703



4702 4701

All material: HR50280 high resiliency polyurethane foam

FIGURE 48

HR50280

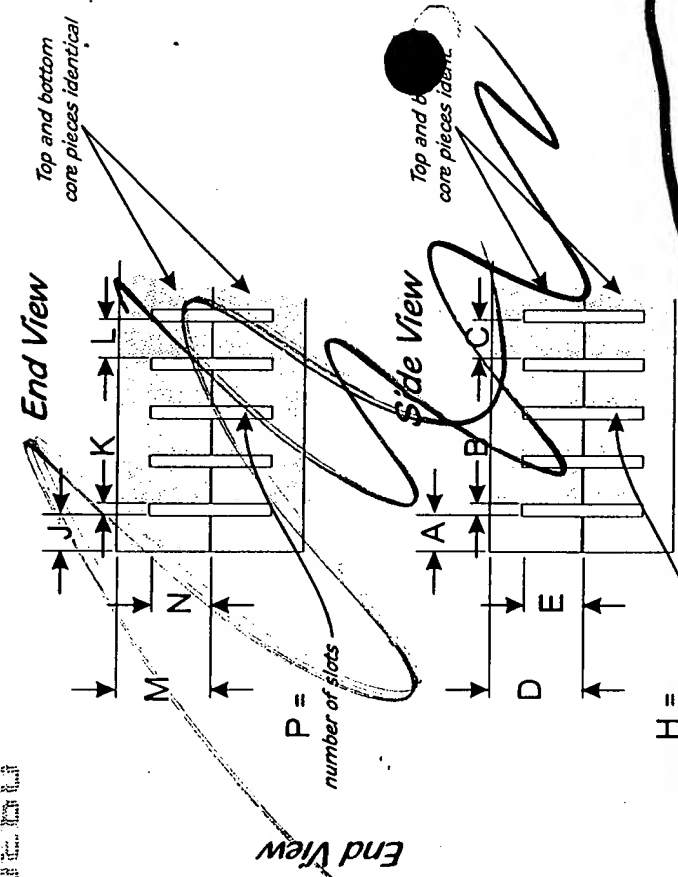
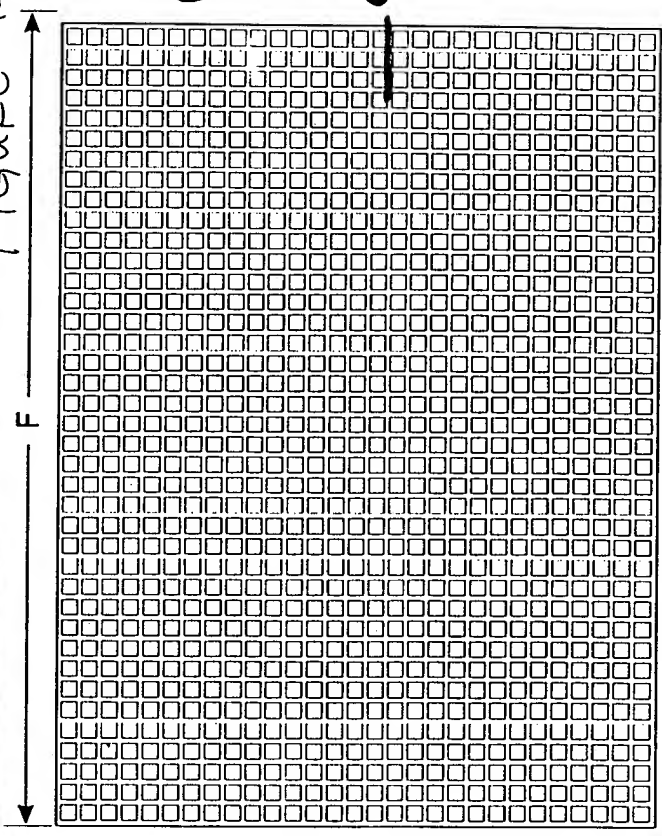


FIGURE 48

Dimensions:

Dimension (inches)	Twin	XL	Double	Double XL	Queen	King	Cal King
A	1.50	1.50	1.50	1.50	1.50	1.50	1.50
B	0.53	0.50	0.53	0.50	0.50	0.50	0.51
C	1.50	1.50	1.50	1.50	1.50	1.50	1.50
D	3.50	3.50	3.50	3.50	3.50	3.50	3.50
E	2.50	2.50	2.50	2.50	2.50	2.50	2.50
F	74.50	79.50	74.50	79.50	79.50	79.50	84.00
G	38.00	38.00	53.00	53.00	60.00	76.00	72.00
H	36	39	36	39	39	39	41
I	1.50	1.50	1.50	1.50	1.50	1.50	1.50
J	0.53	0.53	0.48	0.48	0.52	0.51	0.51
K	1.50	1.50	1.50	1.50	1.50	1.50	1.50
L	3.50	3.50	3.50	3.50	3.50	3.50	3.50
M	2.50	2.50	2.50	2.50	2.50	2.50	2.50
N	18	18	26	26	29	37	35
P	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Q	5.50	5.50	5.50	5.50	5.50	5.50	5.50
R	0.53	0.50	0.53	0.50	0.50	0.50	0.51
S	100	106	116	122	128	144	144
# of side support pieces							

G



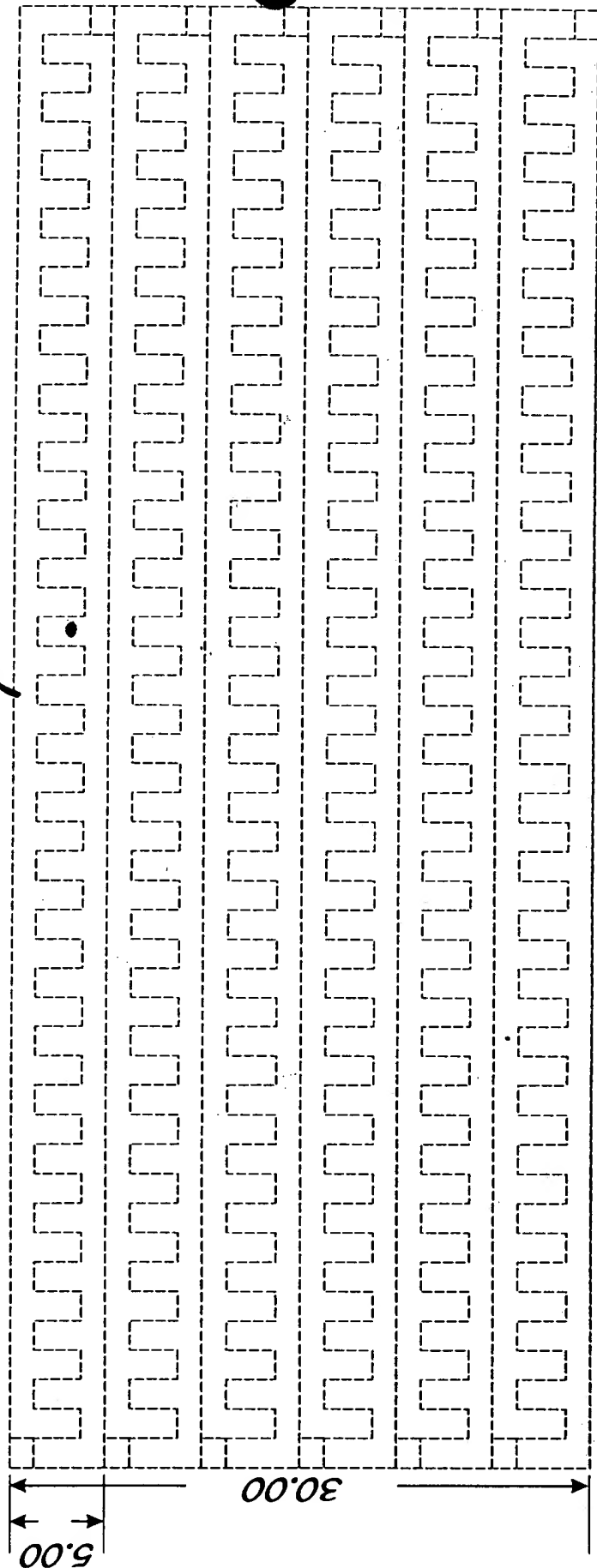
Top view of Bottom Core Piece

4801

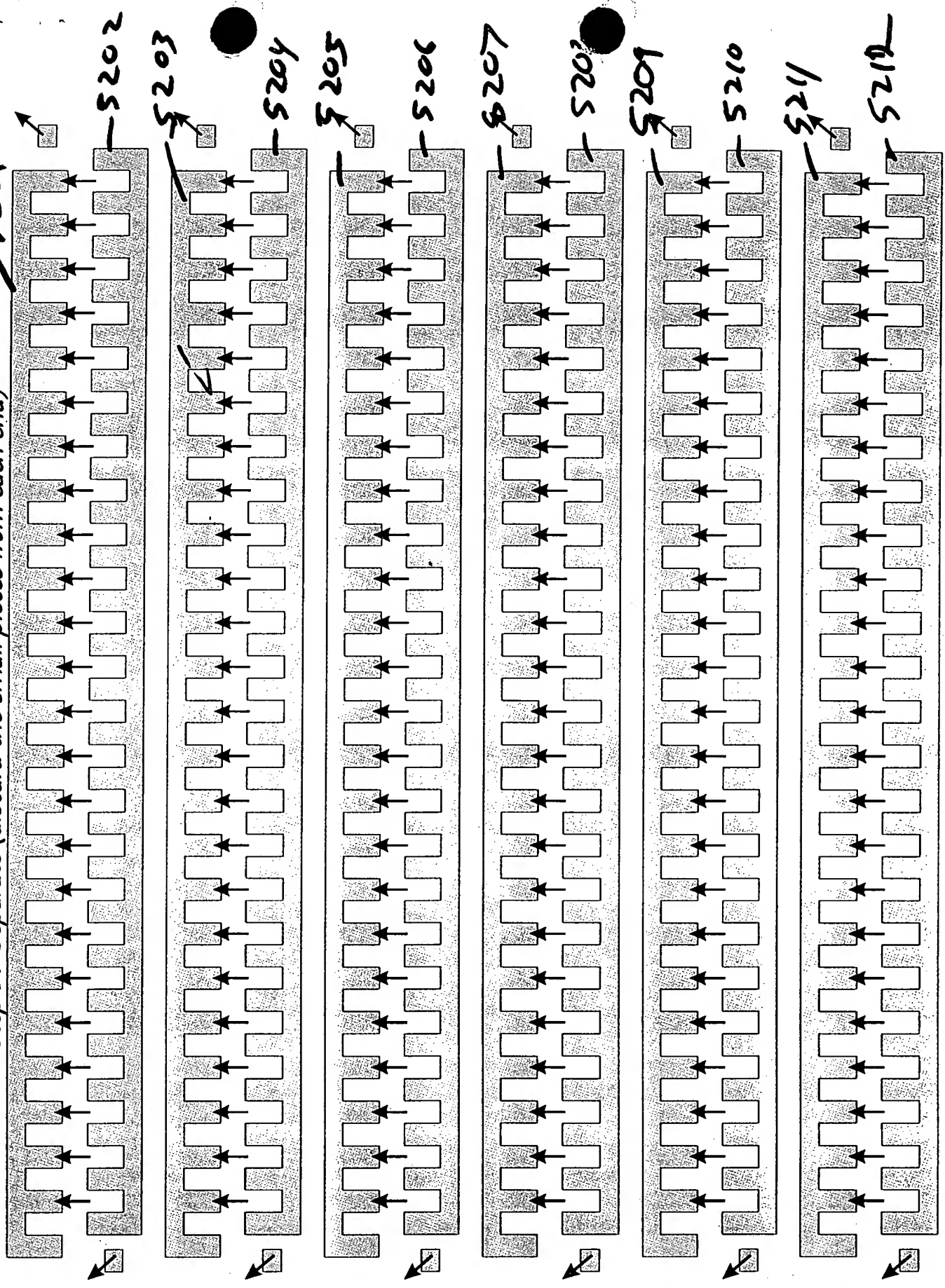
66E050 626E0E60

FIGURE 5101

5101  
Step 1: Cut foam bun (along dashed lines) with X-Y programmable wire profile saw



Step 2: Separate (discard the small pieces from each end)



602050-620022 ~~52~~  
Figure

Step 3: Shift over one cell width to align

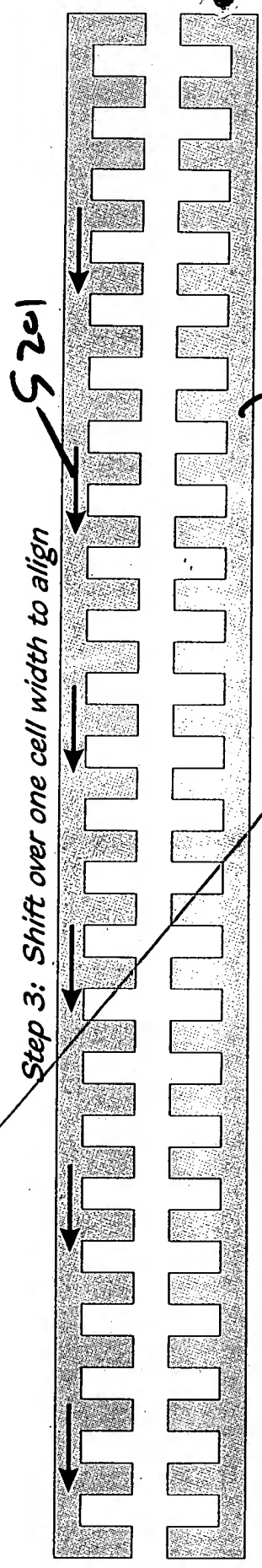
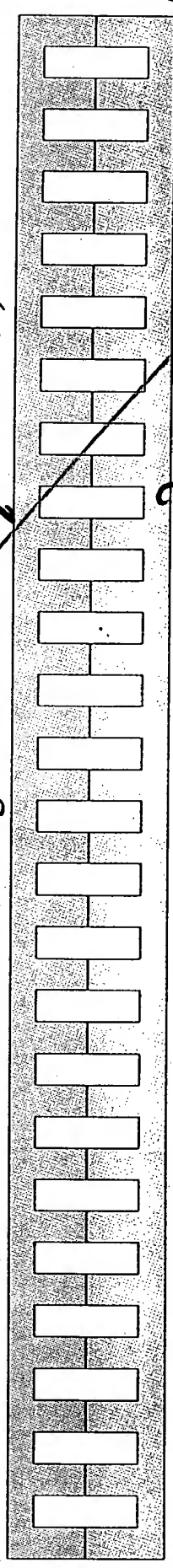


Fig. 53

Step 4: Bond with adhesive (the original 5.00" thickness becomes 7.50")



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TekSource, LC. Unauthorized use,  
disclosure, or reproduction prohibited.

~~Figure 52~~

Figure 52a

Step 3: Shift over one cell width to align

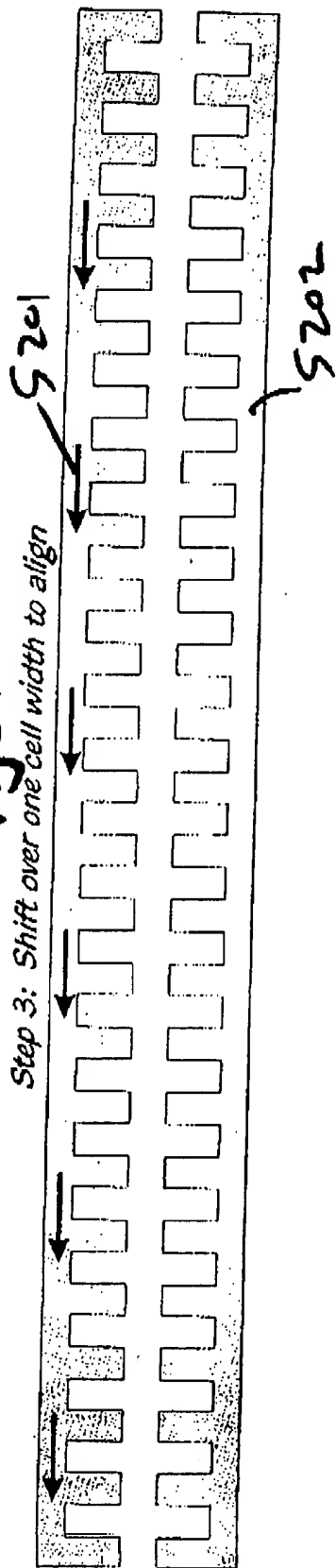


Fig. 53

Step 4: Bond with adhesive (the original 5.00" thickness becomes 7.50")

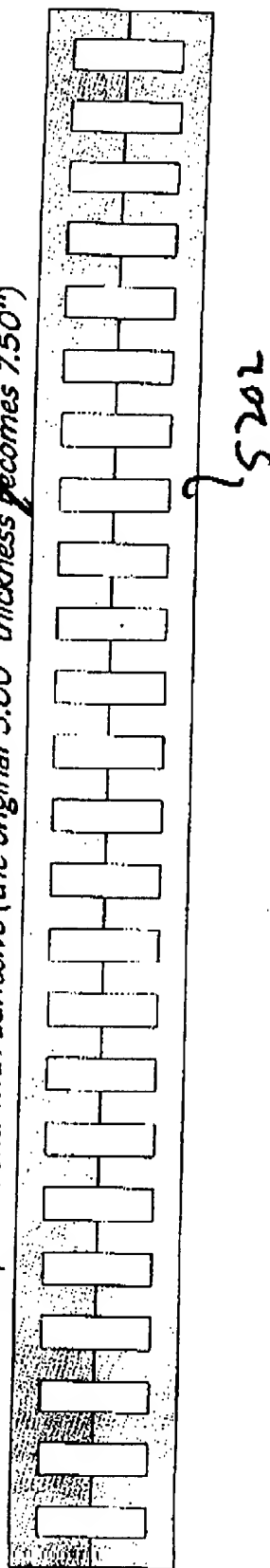
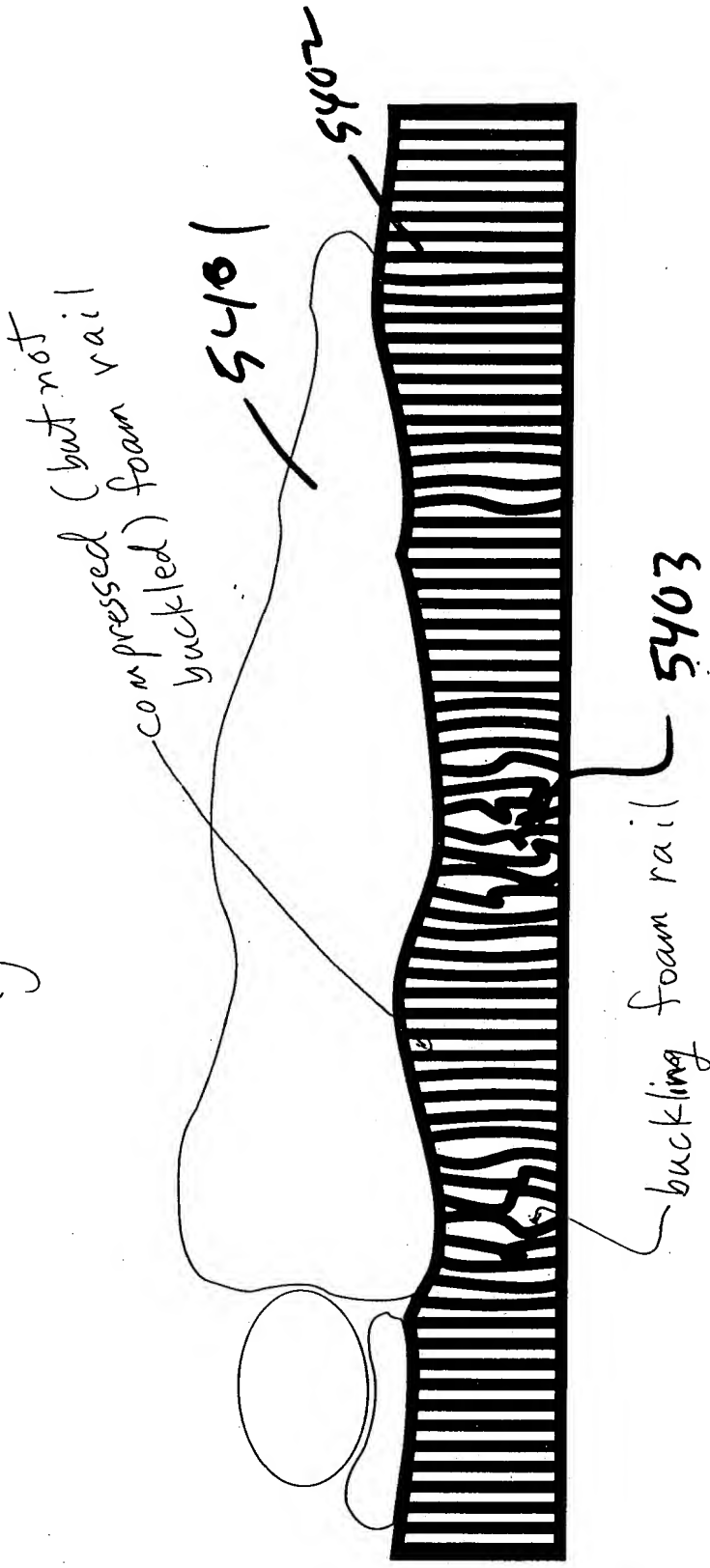
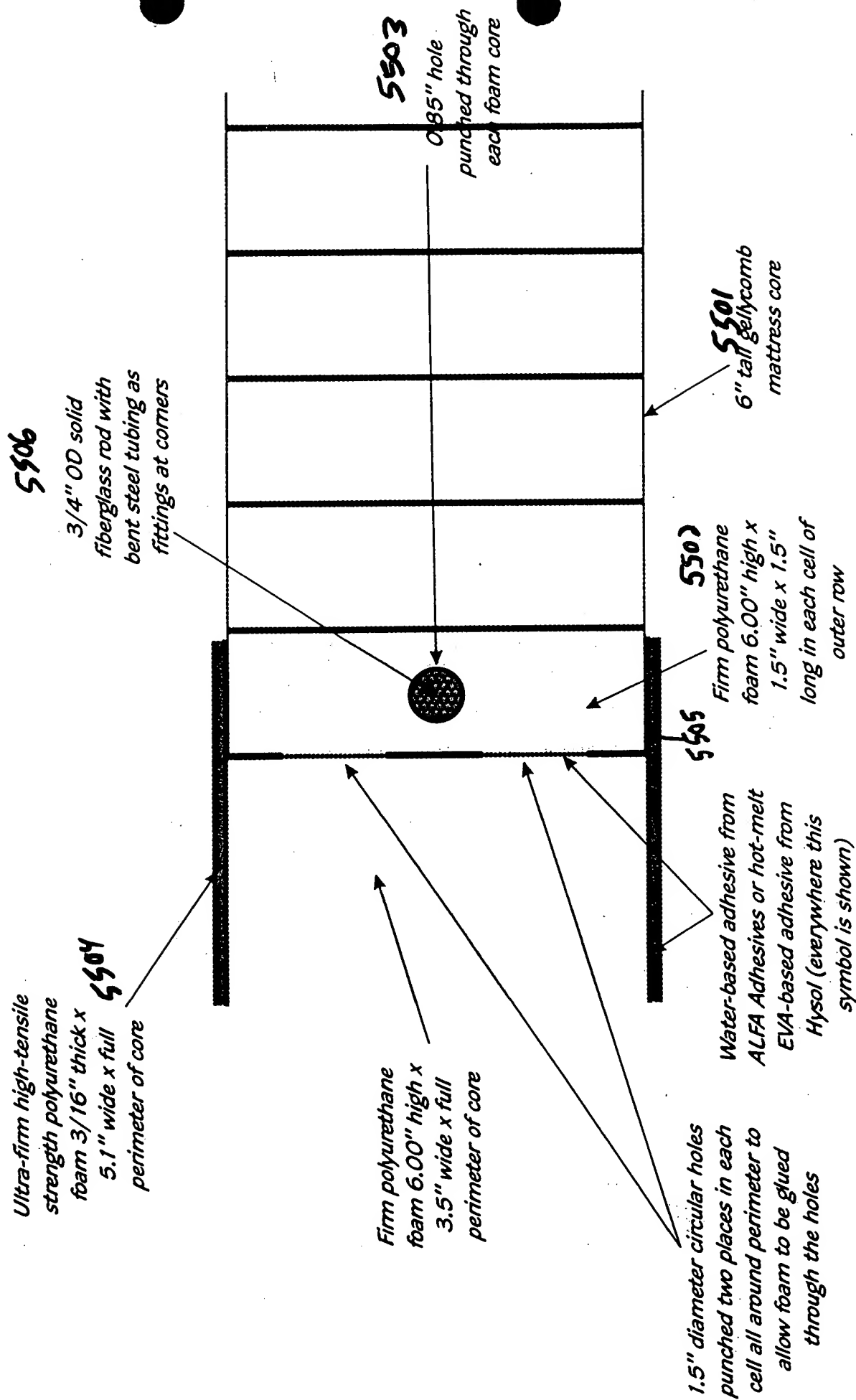


Figure ~~54~~ 54



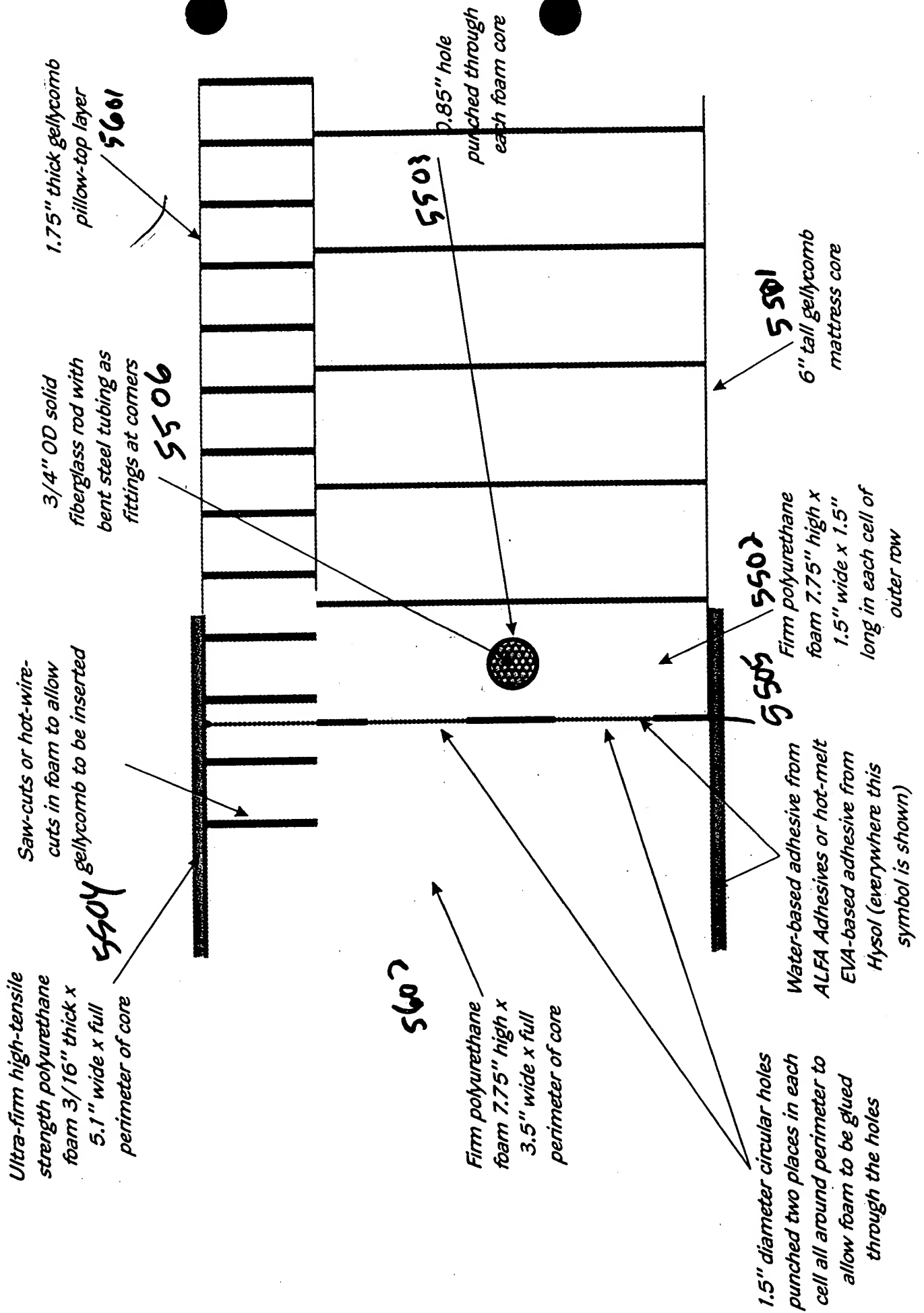
662050" 62020200

Figure # 55



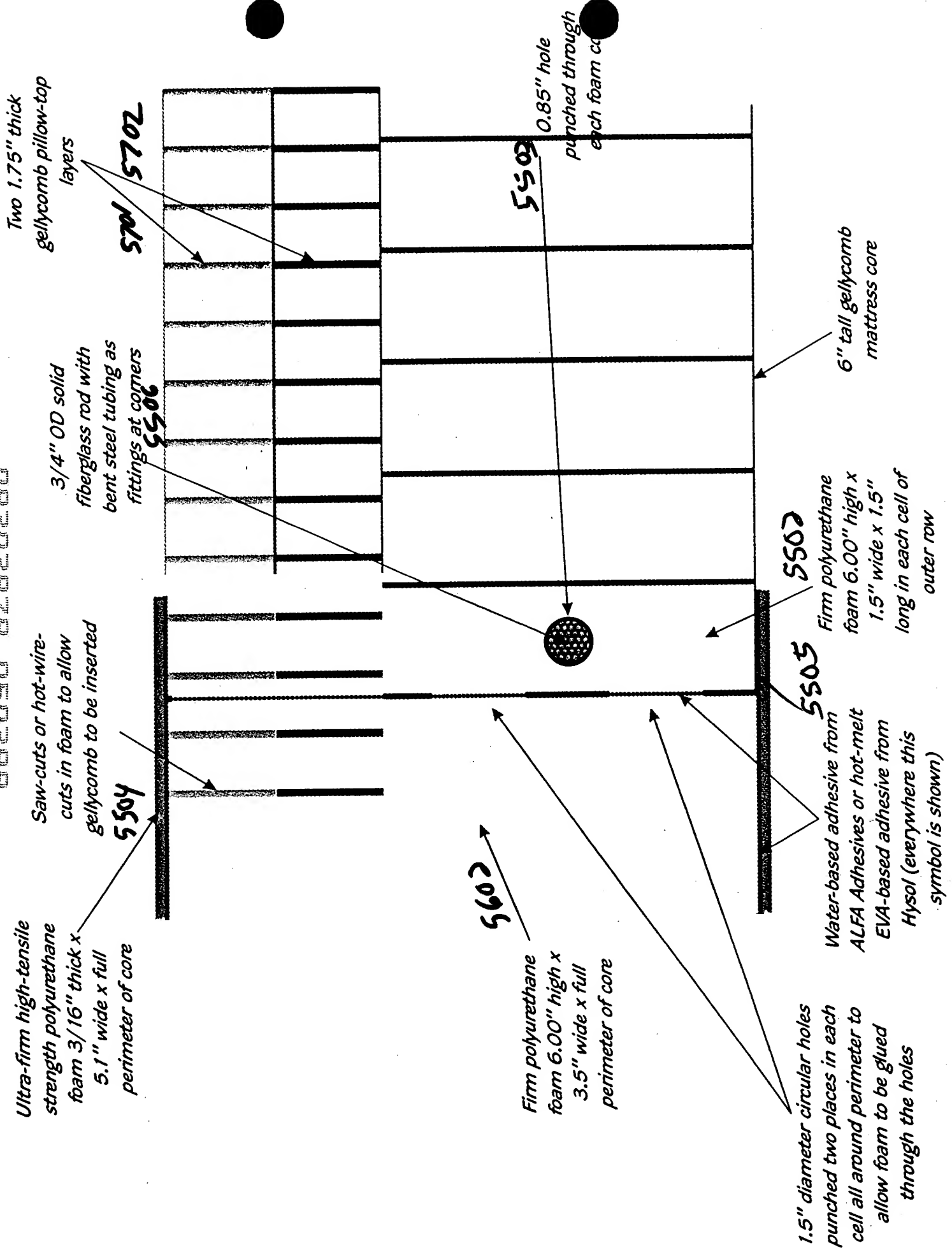


**Figure 56**



**Figure 57**

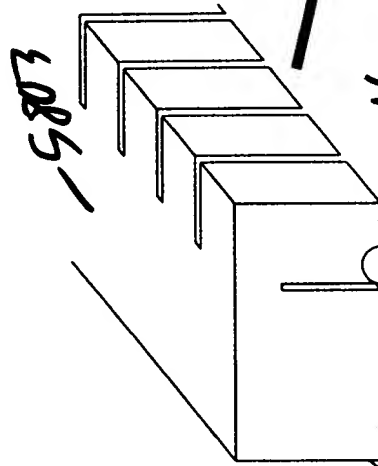
662090-62620200



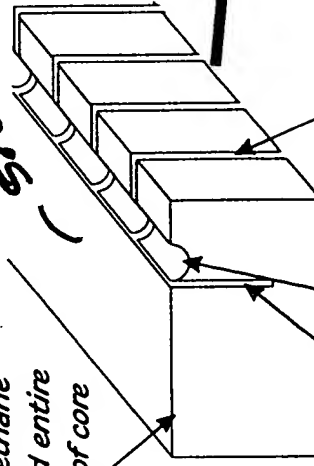
SECRET Figure 4

3/4" OD solid fiberglass rod with bent steel tubing as fittings at corners

Gellycomb is beveled to one inch below the surface (top and bottom) all around the perimeter



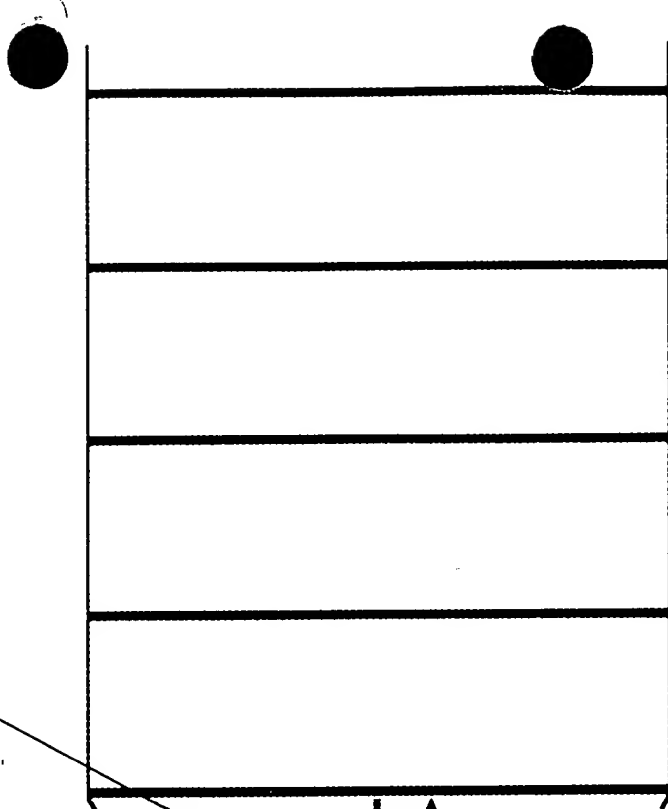
Firm polyurethane foam around entire perimeter of core



Saw-cut recess for the gellycomb perimeter wall

Router-cut recess for the fiberglass rod

Saw-cut recesses for the gellycomb



6" tall gellycomb mattress core

Approx 3.5" (varies by bed size to fill out the mattress to standard width/length)

Approx 1.65"

0.10"

Approx 5.25"

Water-based adhesive from ALFA Adhesives or hot-melt EVA-based adhesive from Hysol

**Figure 59**

*Ultra-firm high-tensile*

*strength polyurethane*

*foam 3/16" thick full*

*perimeter of core (or,*

*felt mat if it glues well;*

*or, urethane film)*

Water-based adhesive from ALFA  
Adhesives or hot-melt EVA-based  
adhesive from Hysol

Saw-cut  
recesses for the  
gellycomb cell  
side walls

Firm polyurethane  
foam around entire  
perimeter of core

Saw-cut recess  
for the gellycomb  
perimeter wall

Router-cut recess  
for the fiber-glass  
side support rod

Saw-cut  
recesses for  
the  
gellycomb

Circular Blade  
Saw Cut

5901  
1.75" thick gellycomb  
Comfort Layer

5902  
3/4" OD solid  
fiberglass rod with  
bent steel tubing as  
fittings at corners

5805

5903

5804

5901  
6" tall gellycomb  
mattress core

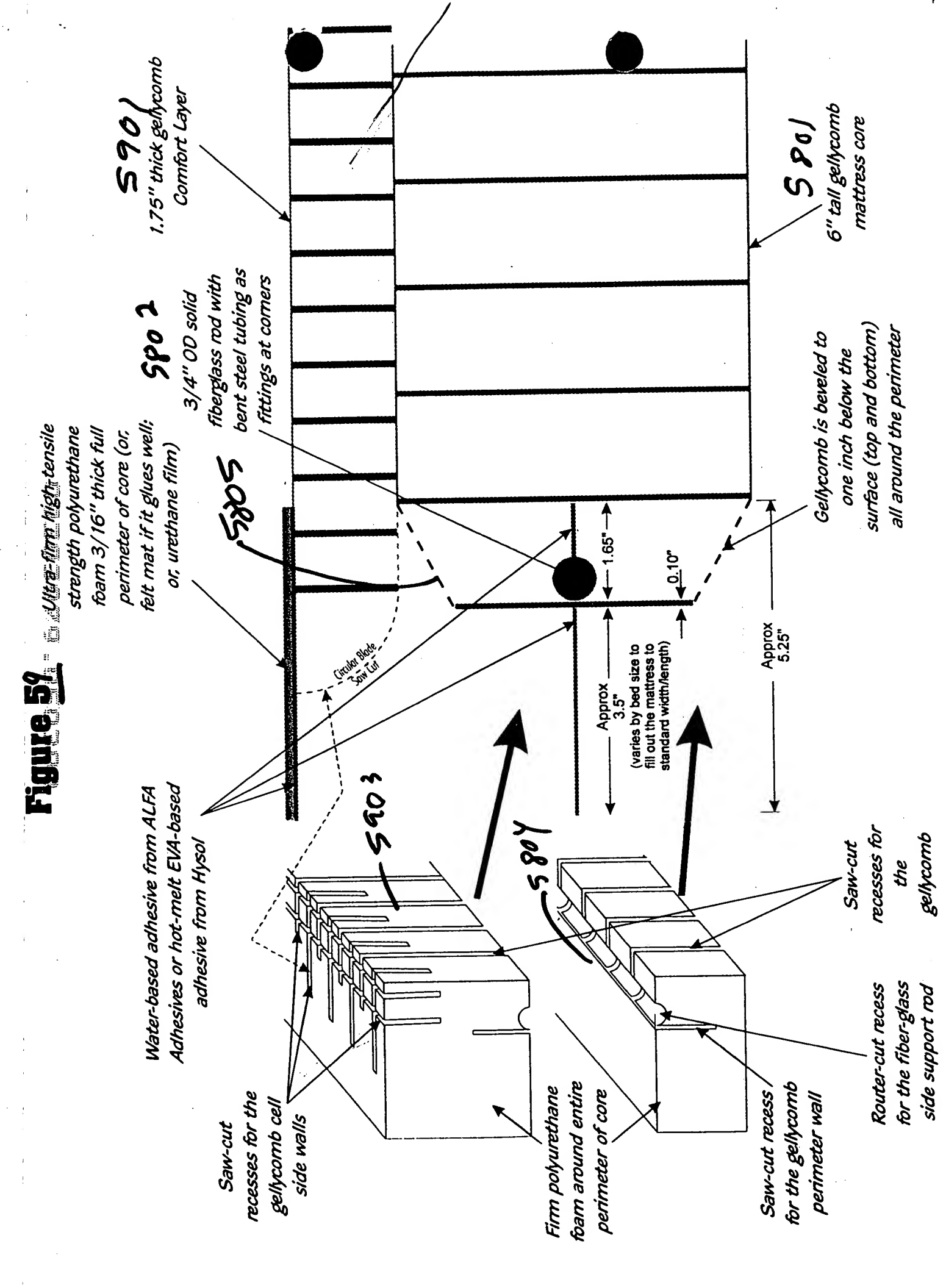
Gellycomb is beveled to  
one inch below the  
surface (top and bottom)  
all around the perimeter

Approx  
3.5"  
(varies by bed size to  
fill out the mattress to  
standard width/length)

1.65"

0.10"

Approx  
5.25"



Side View  
with Foam  
Inserted

6001

Side View

**Construction:** Thin-gauge sheet metal, riveted

**Figure 60**

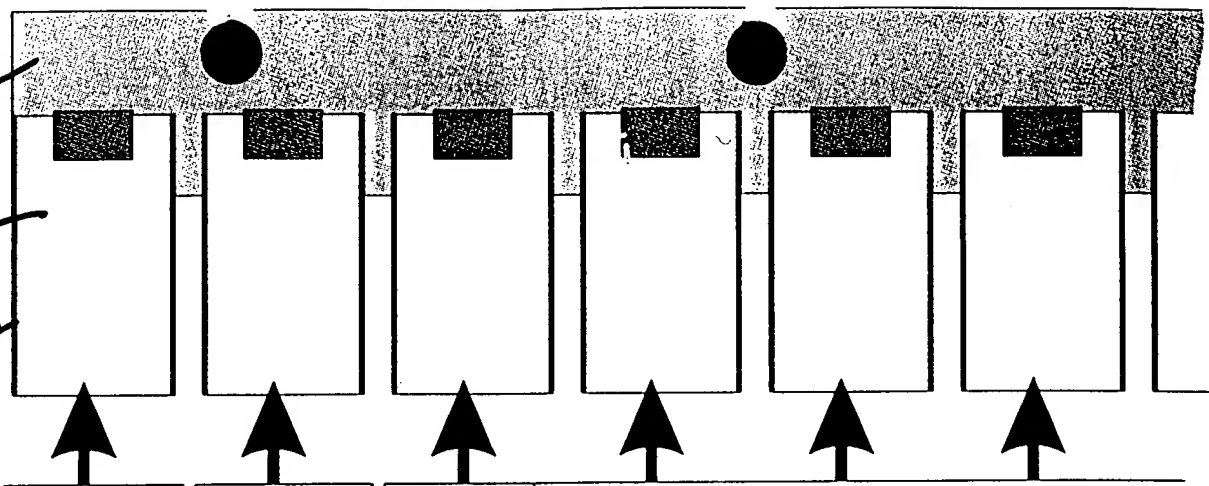
## Front View

6000 →

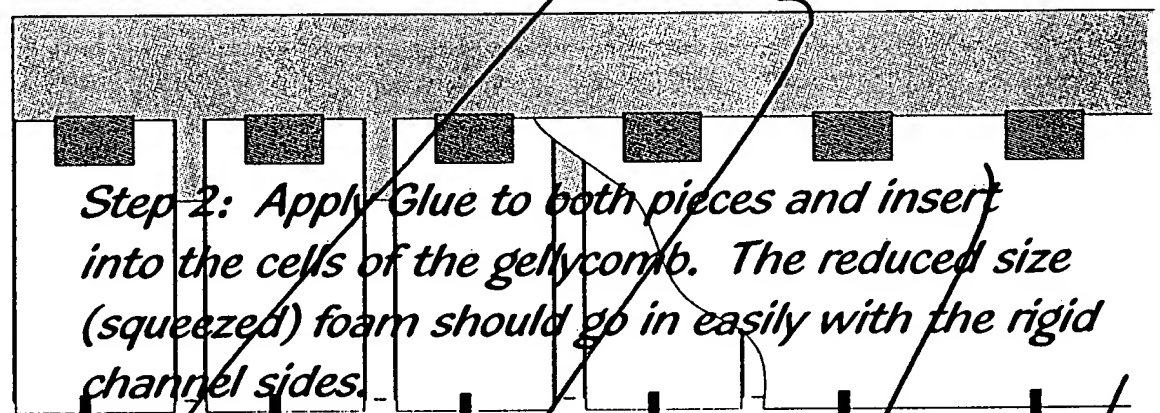
~~15662~~

Side View of different top fixture if gellycomb is placed atop the Intelli-Gel

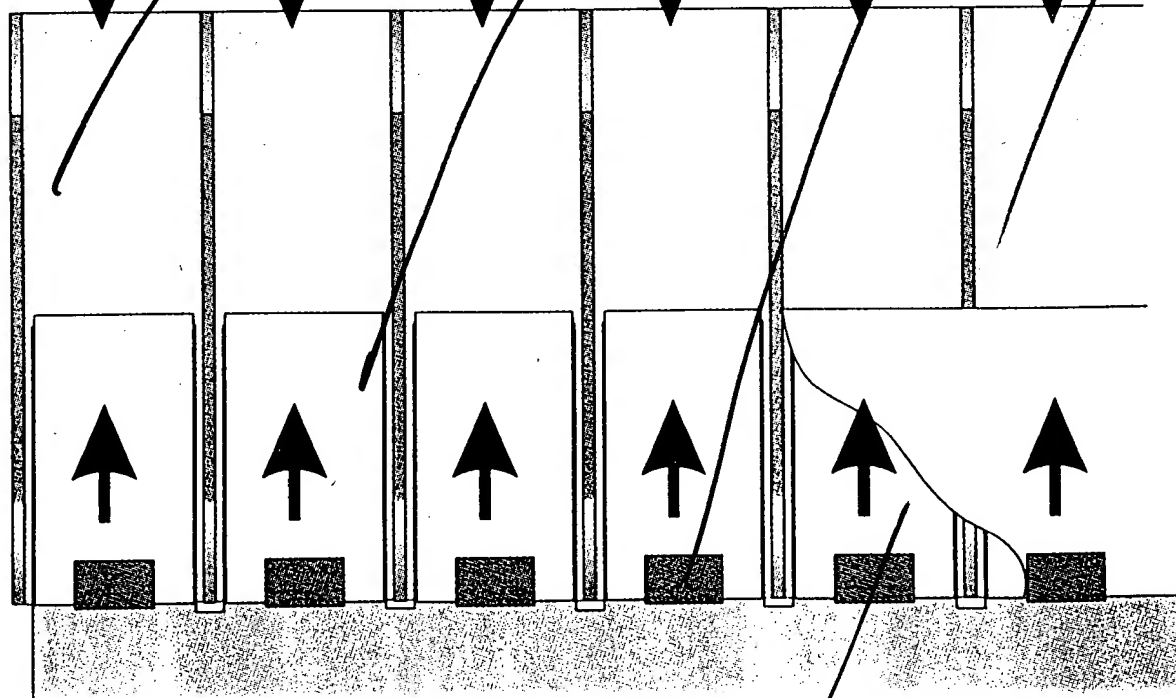
6000 6003 6001  
Figure 61



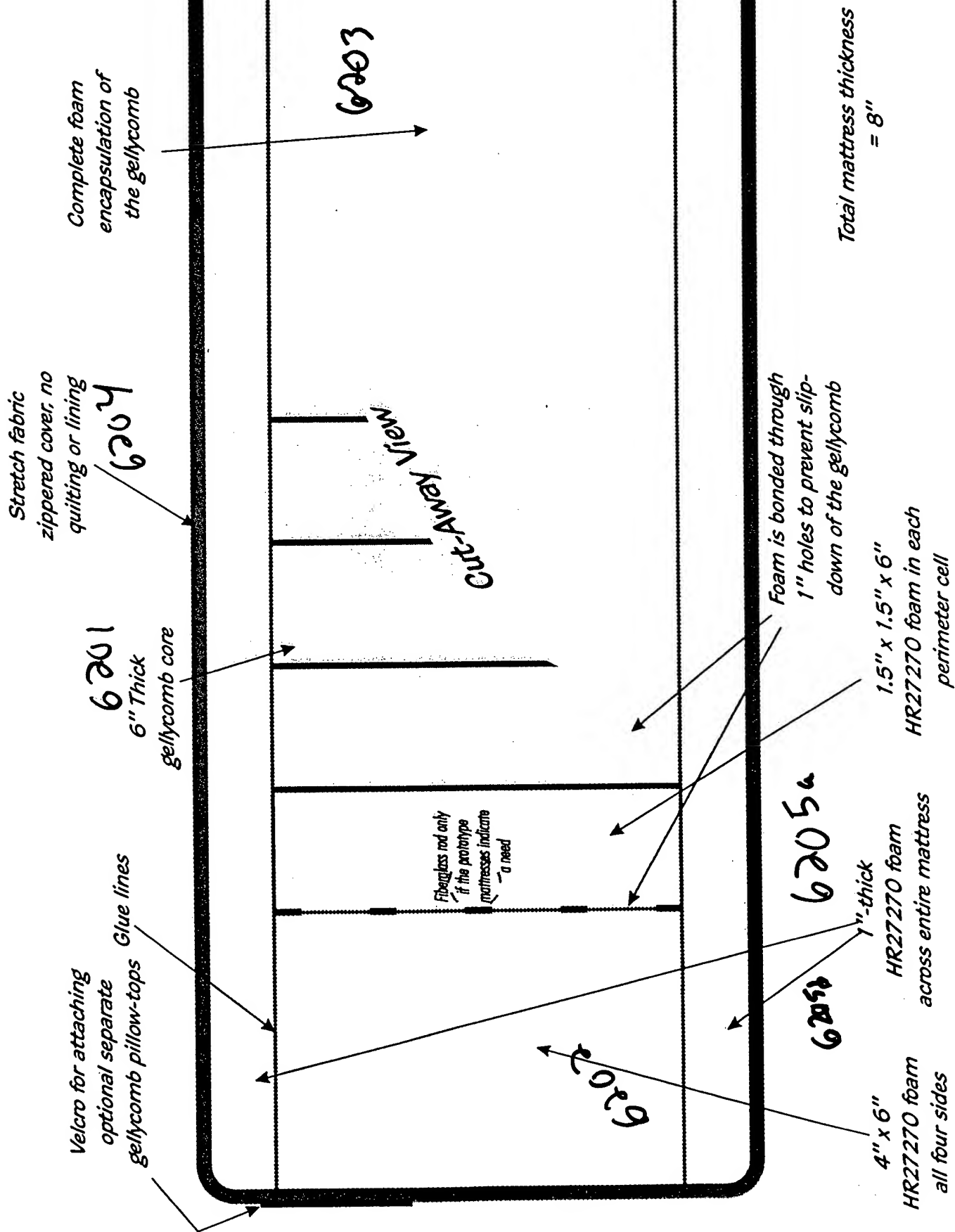
Step 1: Insert Foam into fixture, squeezing the slit foam that is to be inserted into the gellycomb cells into the u-shaped channels



Step 2: Apply Glue to both pieces and insert into the cells of the gellycomb. The reduced size (squeezed) foam should go in easily with the rigid channel sides.

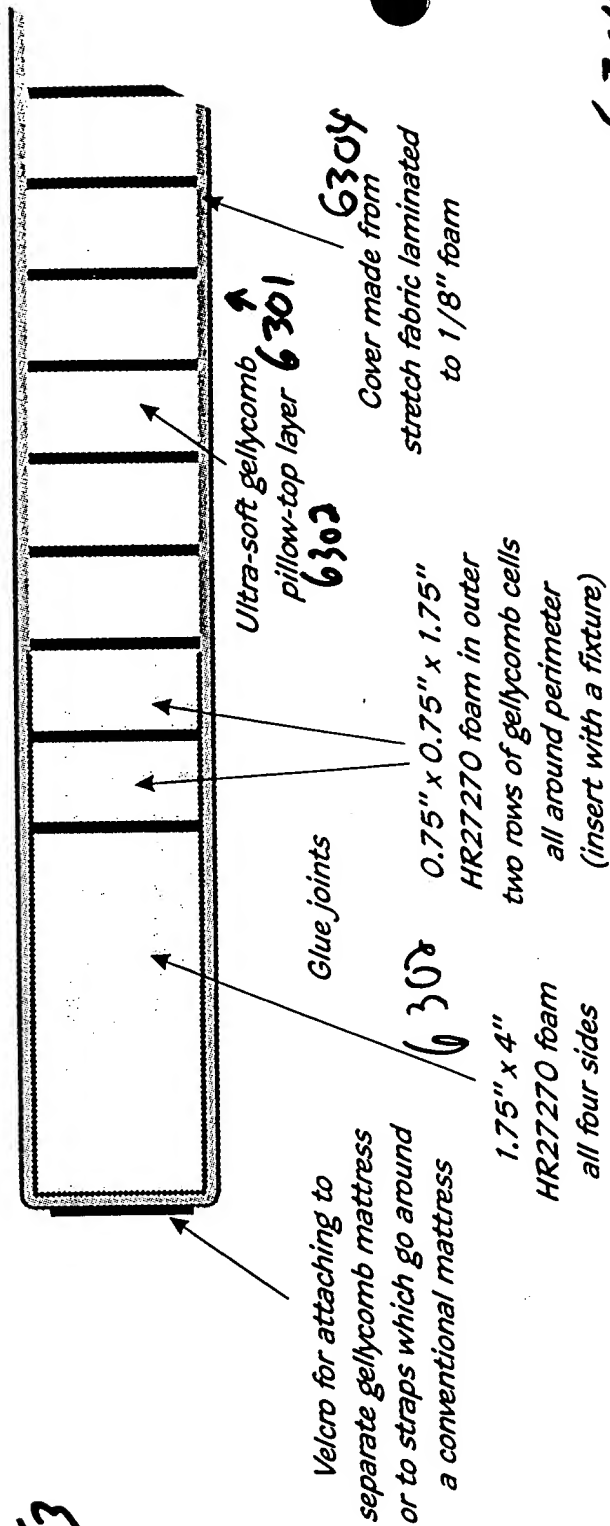


62030 62030 62030  
**Figure 10 622**



**Figure # 63**

66090" 6260260



**Figure # 64**

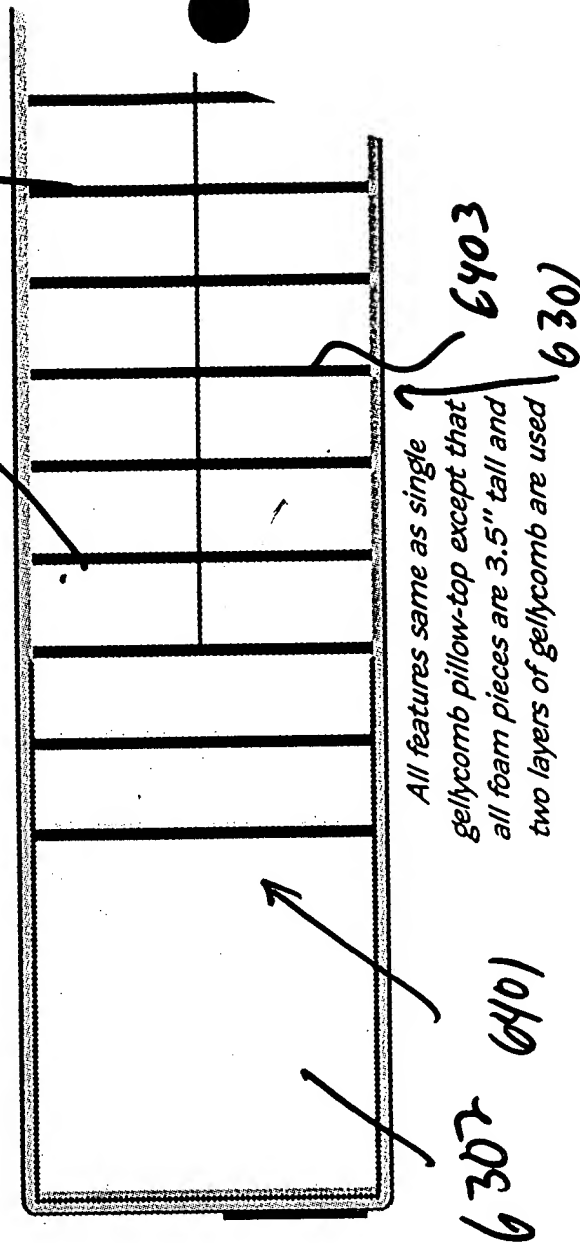
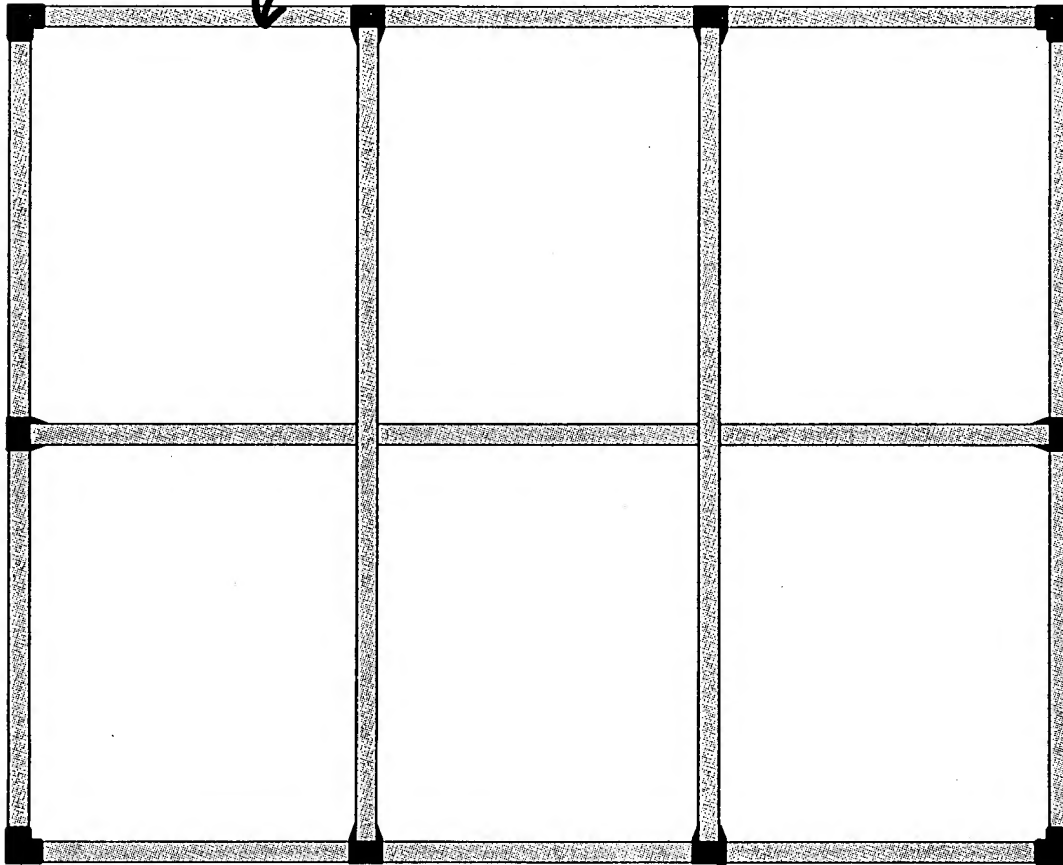




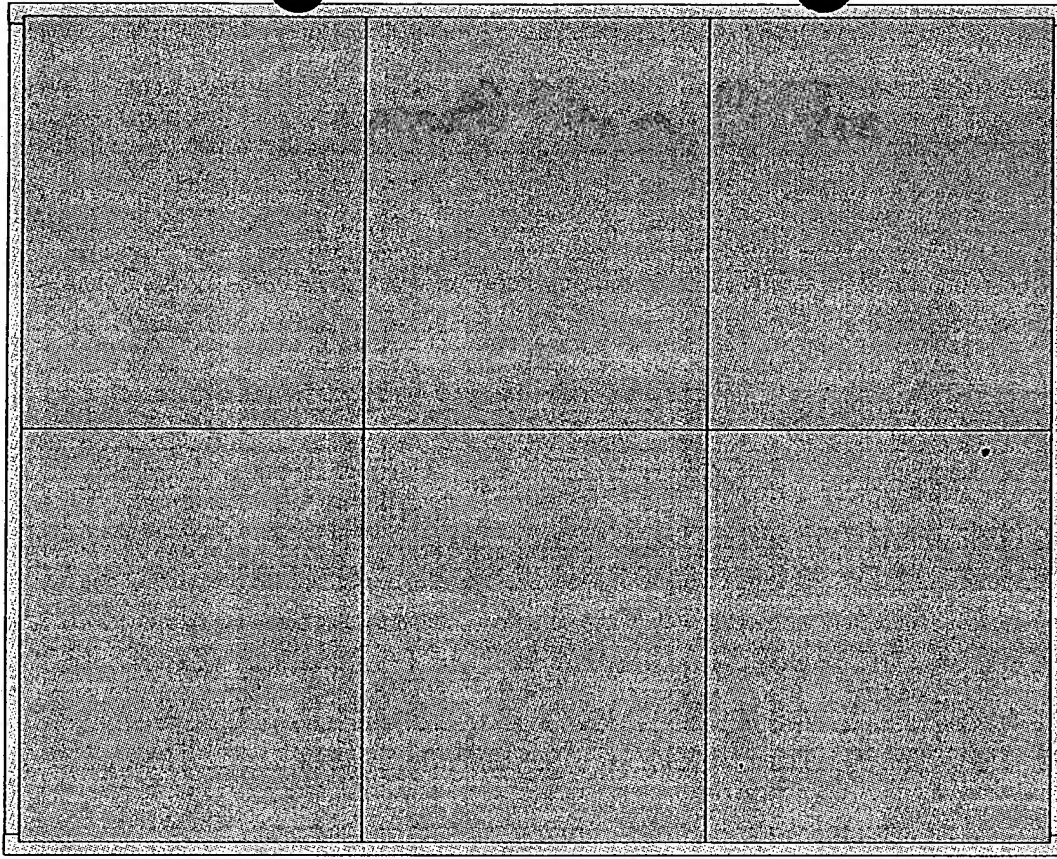
Figure 65

66E050 66E0E00

Figure 66



6601



6601

# Figure 67a

662050" 62620E60

Hinge mechanisms are 0.5"x0.5" galvanized 90-degree angled sheet metal that bends in ductile fashion (0.5" screwed to the platform wood and 0.5" screwed to the rotating end or side)

9" x 1" strip of 1/4" plywood to properly space the "hinge" for the ends

5 x 6 lattice (for Queen) of 1x2's, flush with and screwed to the 1/4" plywood top. Width-wise pieces are continuous,

Connector (one at each corner)

Fig 67b

No Tool Assembly:

1. Fold down the pre-upholstered ends (automatically raises up to cover the bare wood)

Fig 67c

See through piece shown for assembly convenience only and represents the non-upholstered end plate

Fig. 67d

3. Snap corners together (sides to ends) via barbed male-female permanent connectors

Figure 4  
682050-6 AF 67e

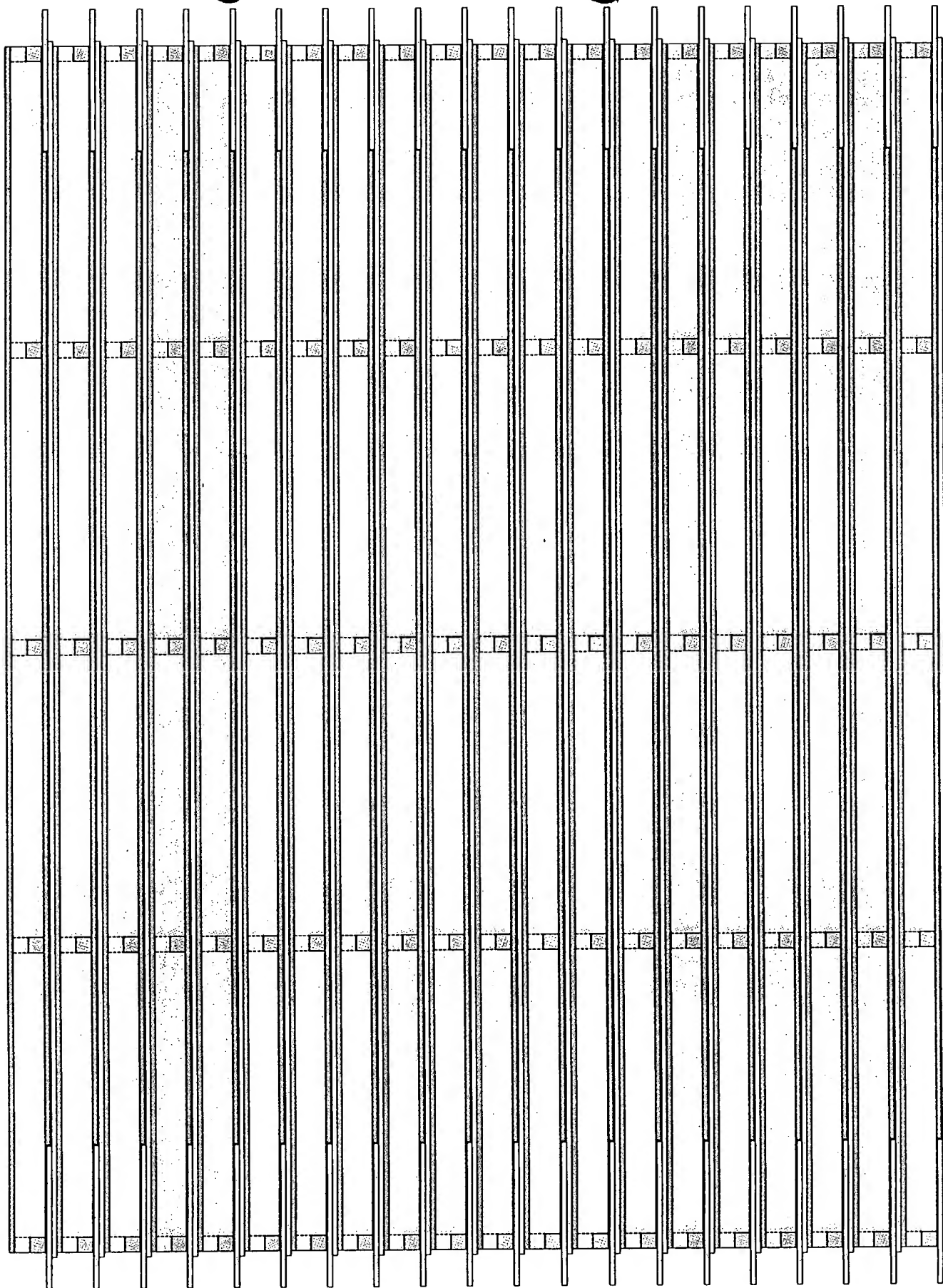
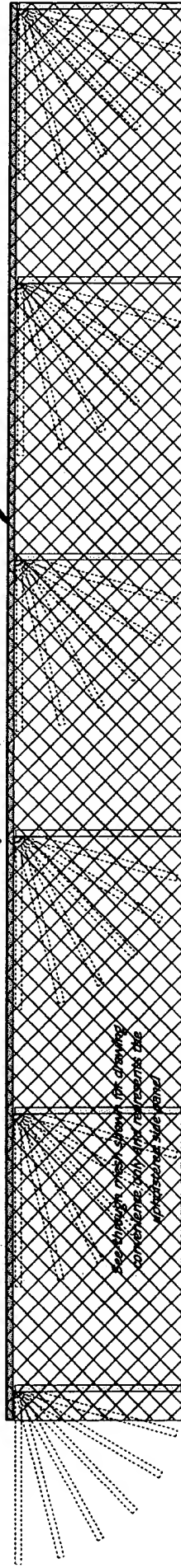


Figure # 619

66E050-626E0E60

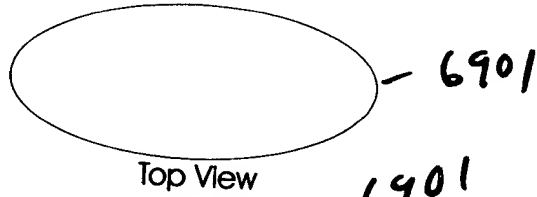


Fig. 686



See drawing 6801 for details  
on the use of the component in  
the system.

FIG. 69a



Top View

Fig 69b



Front View



End View

6901

Fig 69c

000000-02000000

Figure 70

Quilted Top with Fiber

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

7001

7002

Figure 71

Quilted Top with Fiber

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

7101 7102 7103

Figure 72

Quilted Top with Fiber & Foam

6"-high hollow column gel elastomer with 1.8" square holes and 0.10" wall thickness

7002

7004

7003

7001

Figure 73

Quilted Top with Fiber

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

6"-high hollow column gel elastomer with 1.8" square holes and 0.10" wall thickness

7301

7302

7303



Figure ~~74~~ 7404

Quilted Top with Fiber

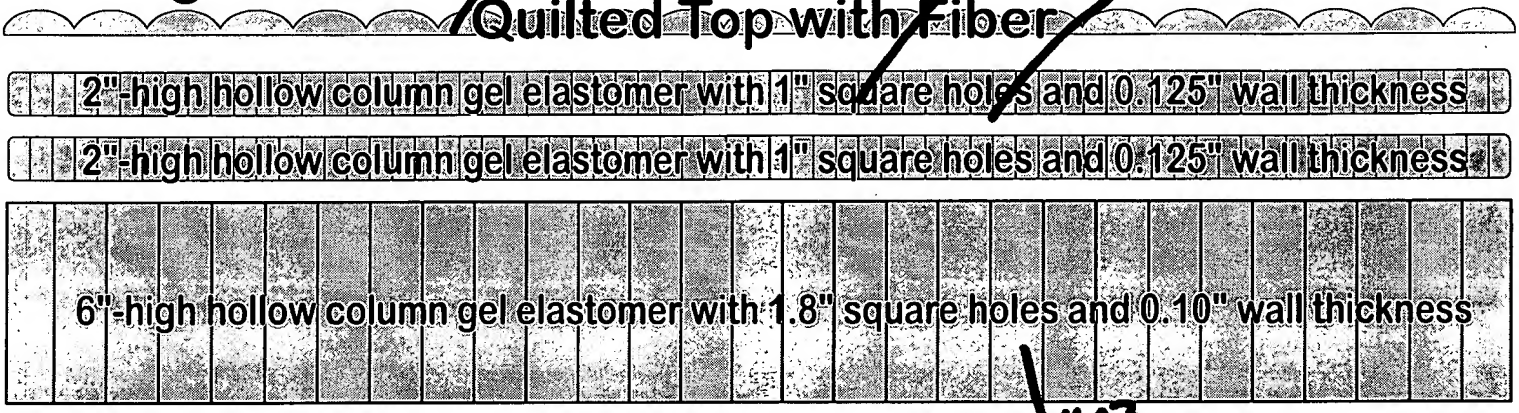


Figure ~~75~~ 7503

Quilted Top with Fiber

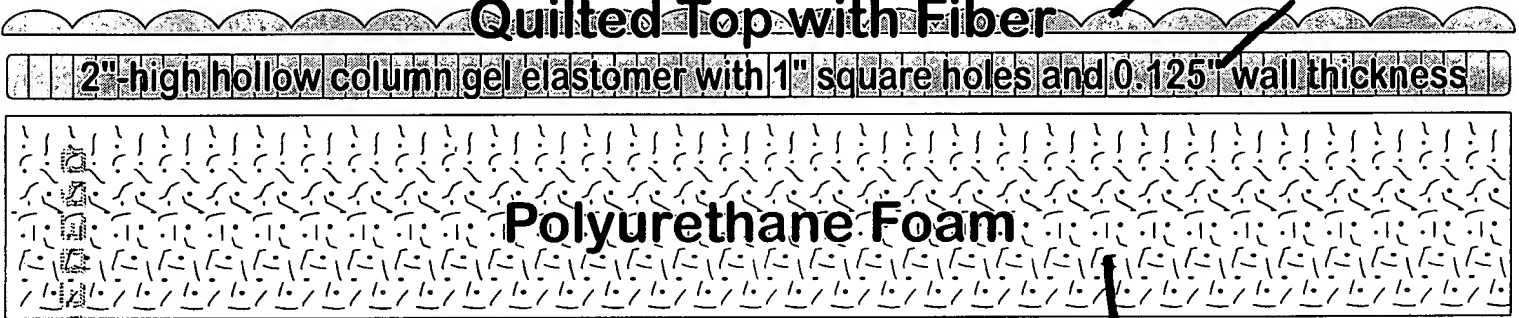


Figure ~~76~~ 7604

Quilted Top with Fiber

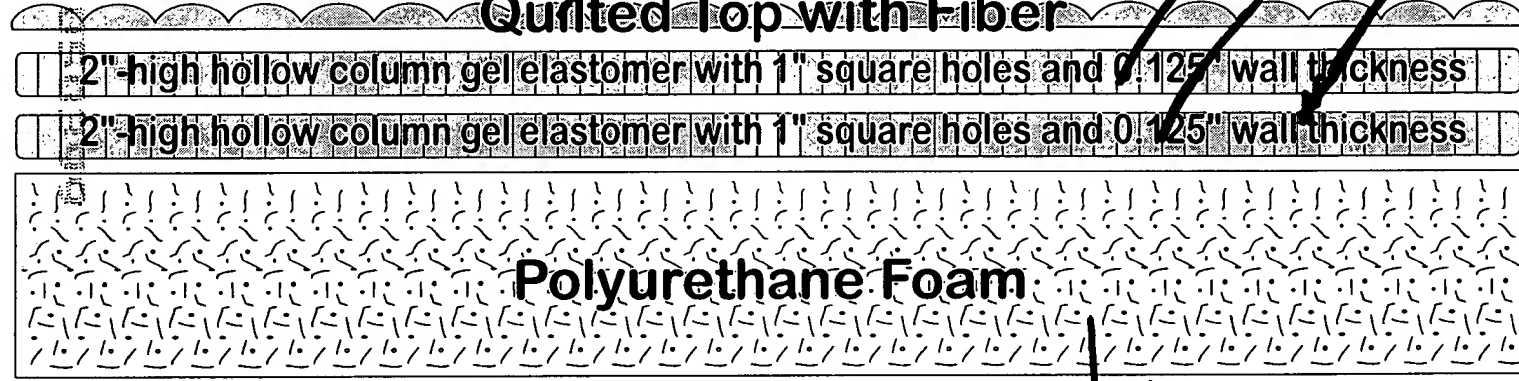


Figure ~~77~~ 7701

Quilted Top with Fiber

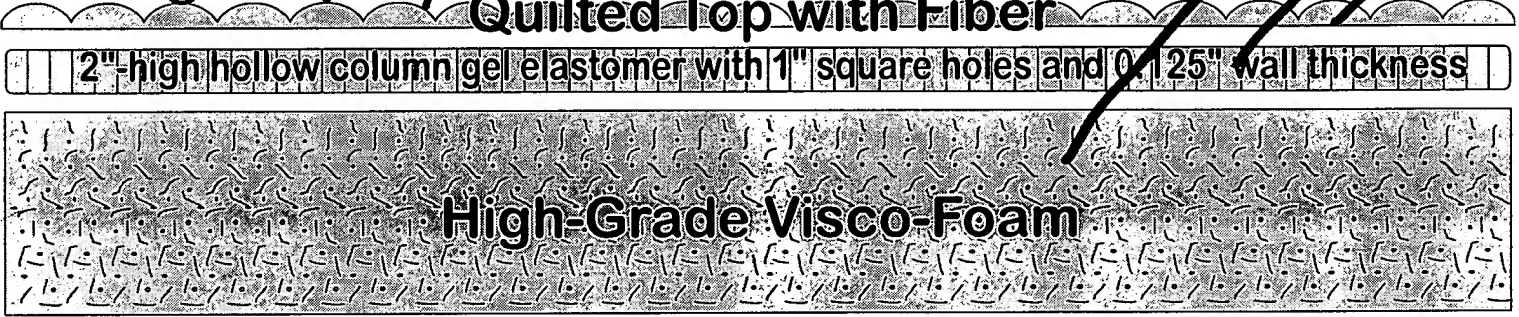


Figure ~~78~~ 78

Quilted Top with Fiber

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

Spring Unit

7801  
7802  
7803

Figure ~~79~~ 79

Quilted Top with Fiber

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

Spring Unit

7901  
7902  
7903  
7904

Figure ~~80~~ 80

Quilted Top with Fiber & Foam

6"-high hollow column gel elastomer with 1.8" square holes and 0.10" wall thickness

Shallow Spring Unit

8004

8001  
8002  
8003

Figure ~~81~~ 81

Quilted Top with Fiber

2"-high hollow column gel elastomer with 1" square holes and 0.125" wall thickness

Latex Foam

8101  
8102



Figure ~~82~~ 82

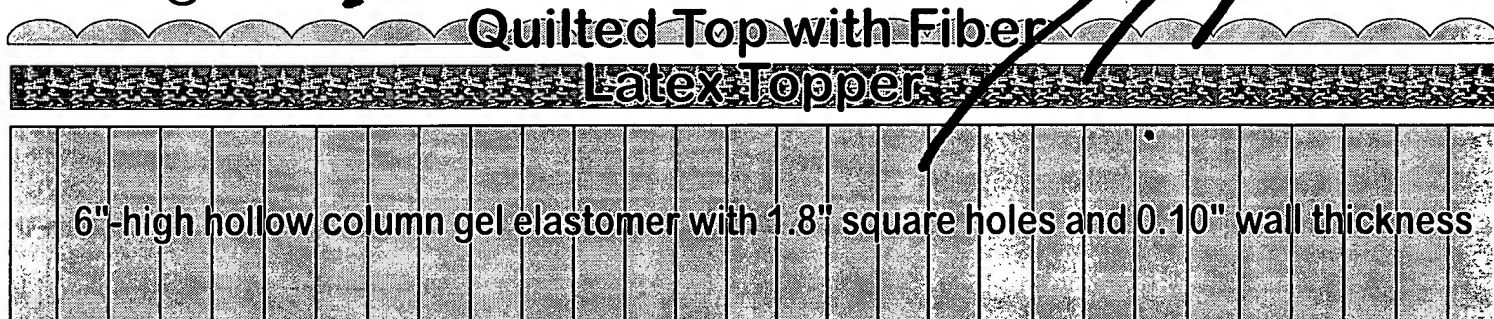


Figure ~~83~~ 83

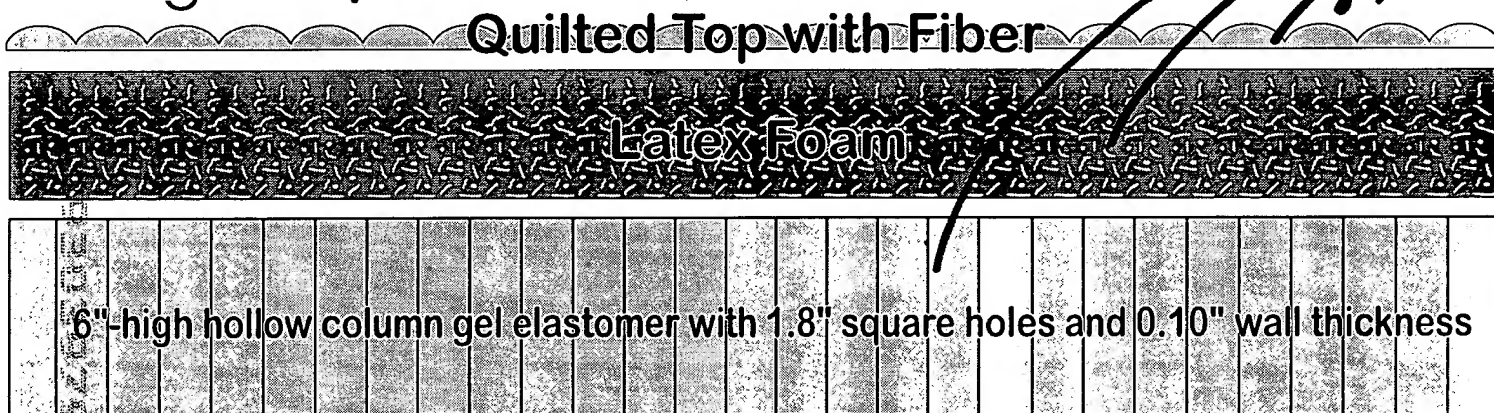


Figure ~~84~~ 84

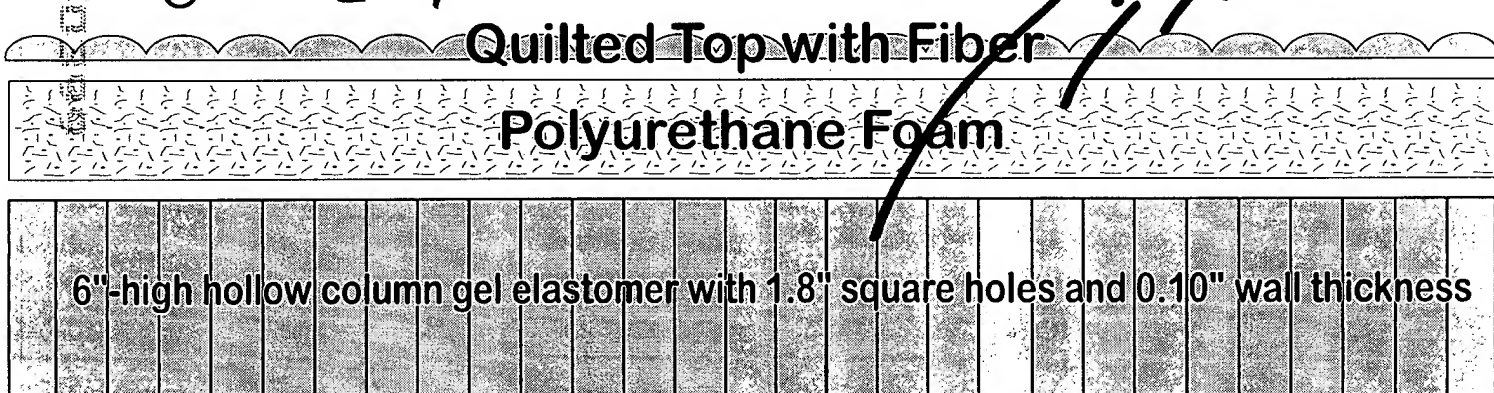
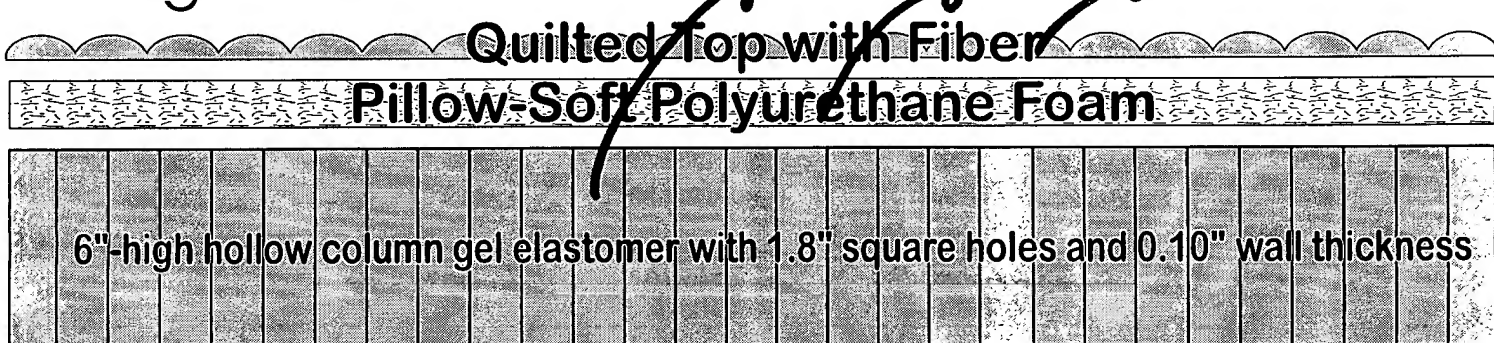
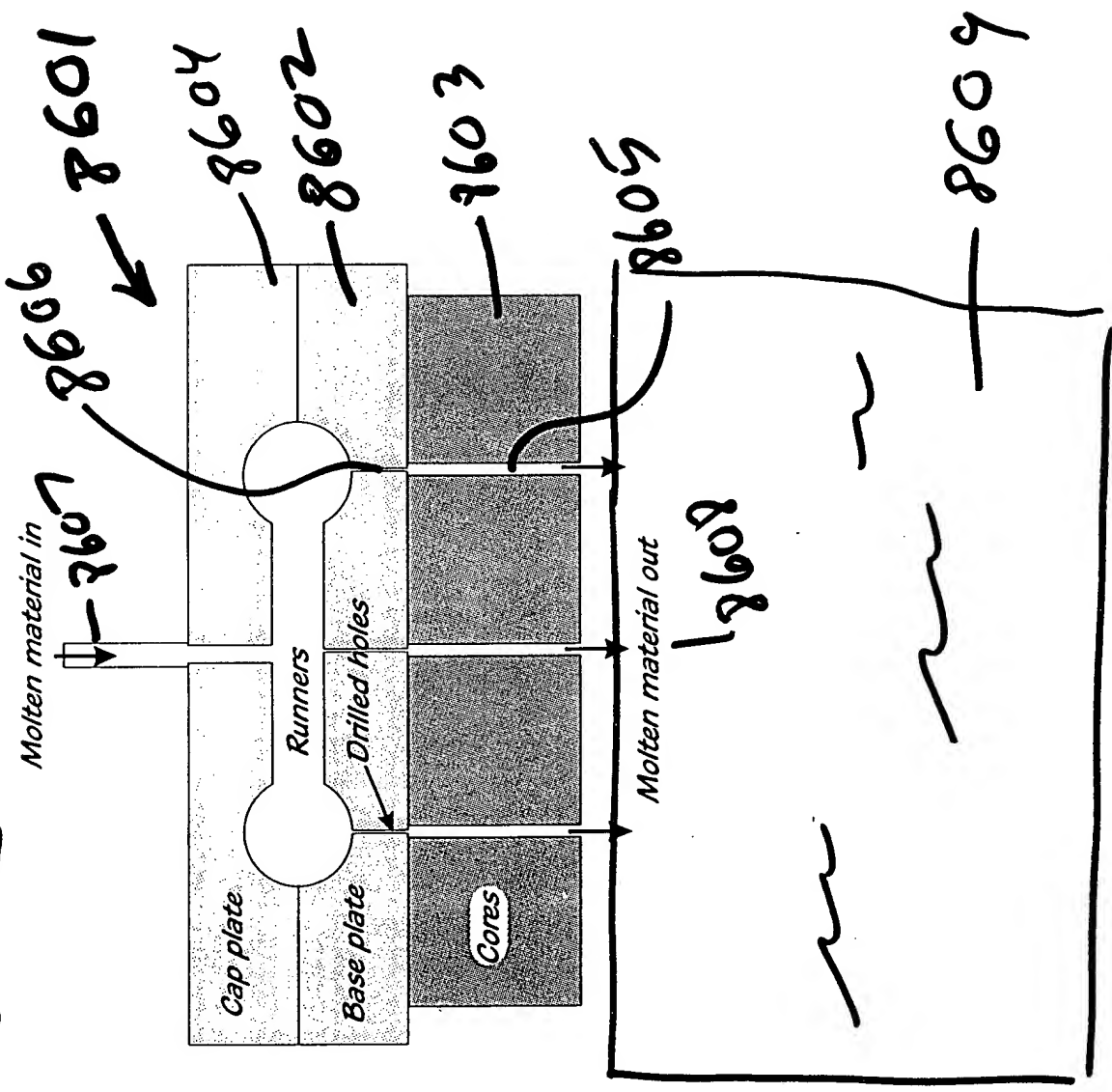


Figure ~~85~~ 85

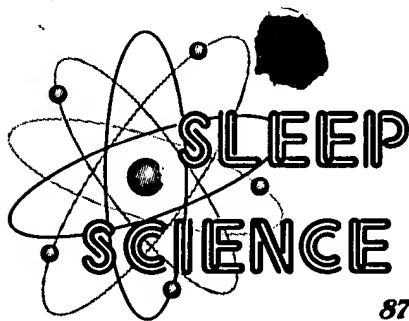


86

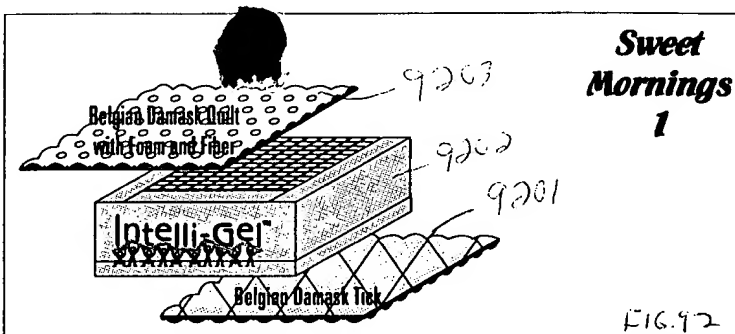
Figure 1



8610

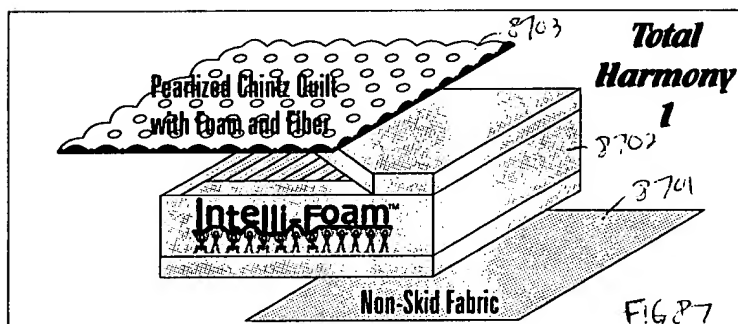


Toll Free  
877-85-SLEEP



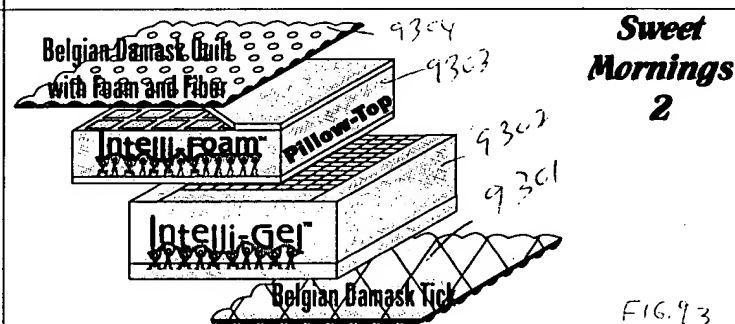
**Sweet  
Mornings  
1**

FIG. 92



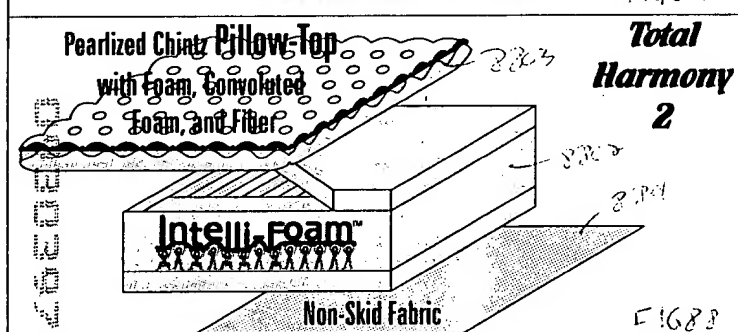
**Total  
Harmony  
1**

FIG. 87



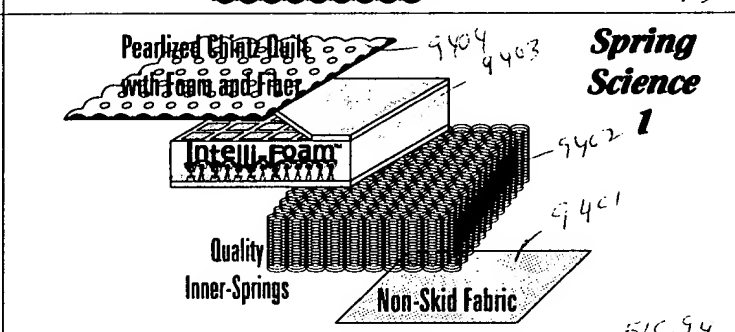
**Sweet  
Mornings  
2**

FIG. 93



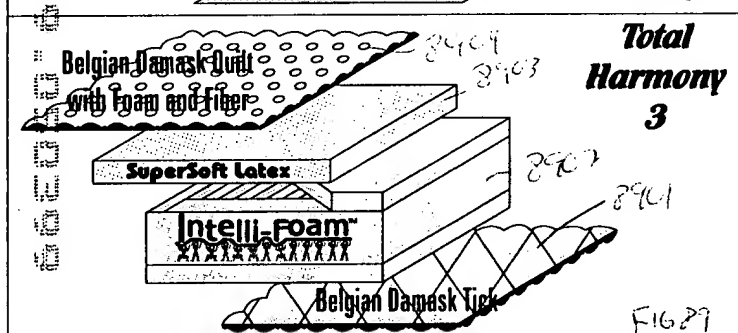
**Total  
Harmony  
2**

FIG. 88



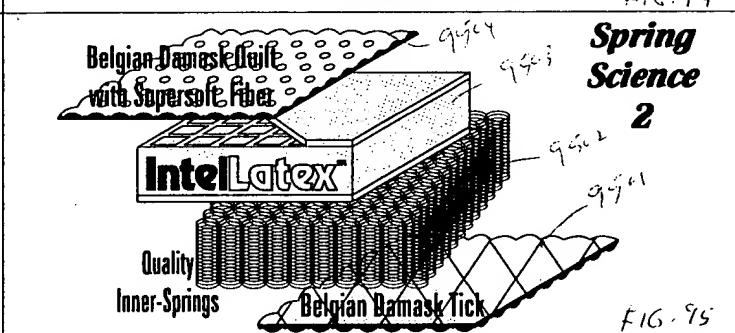
**Spring  
Science  
1**

FIG. 94



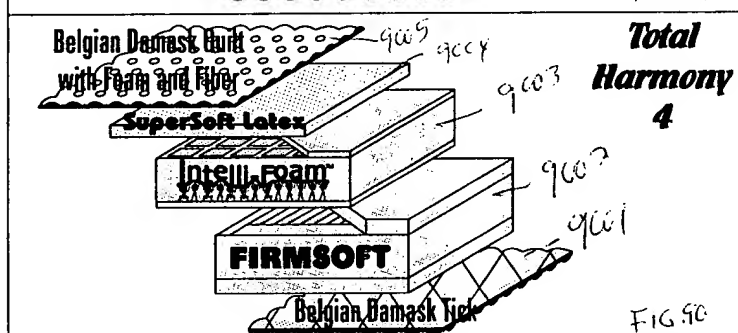
**Total  
Harmony  
3**

FIG. 89



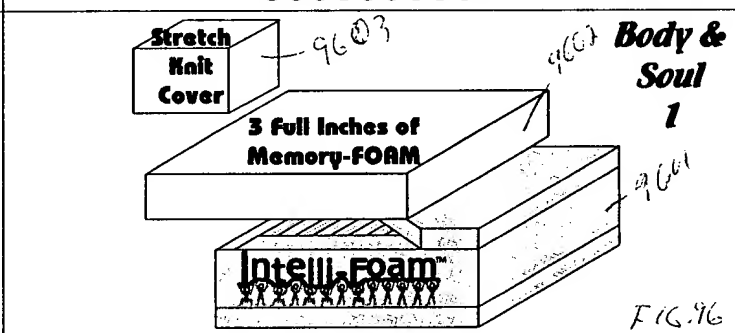
**Spring  
Science  
2**

FIG. 95



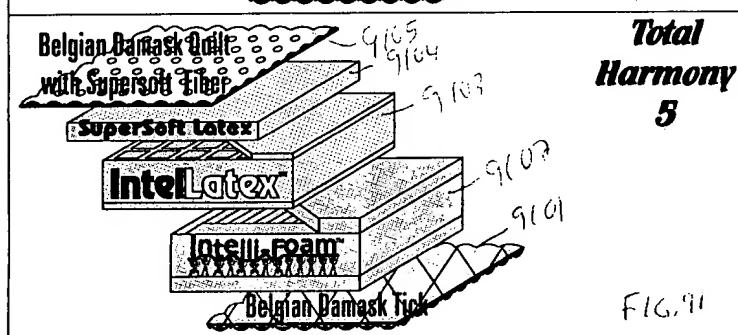
**Total  
Harmony  
4**

FIG. 90



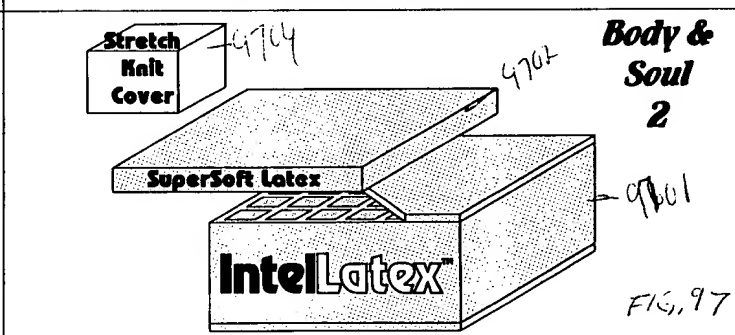
**Body &  
Soul  
1**

FIG. 96



**Total  
Harmony  
5**

FIG. 91



**Body &  
Soul  
2**

FIG. 97